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MODERN WAR.

BY

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DIRECTOR OF THE GEOGRAPHICAL SERVICE OF THE FRENCH ARMY,

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TRANSLATED FROM THE FRENCH,

BY

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Third Regiment Artillery, U. S. Army.

[AUTHORIZED TRANSLATION.]

PART II:

GRAND TACTICS.

WASHINGTON:

JAMES J. CHAPMAN.

1890.

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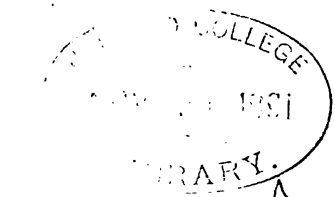

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ERRATA.

Page 60, eleventh line from bottom, for "Régnierville-en-Haye" read Régniéville-en-Haye."
Page 88, fourteenth line from bottom, for "Trantenau" read "Trautenau."
Page 121, ninth line, for "to-morrow" read "to-day."
Page 148, eighteenth line, for "Von Grōben" read "Von der Grōben."
Page 205, eighth line, for "X. Corps" read "V. Corps."
Page 222, first line, for "Vaudières" read "Vandières."
Page 239, fifteenth line, for "1st Corps" read "2nd Corps."
Page 427, fourth line, for "CAPTURE" read "RECAPTURE."

MODERN WAR.

PART SECOND.

GRAND TACTICS.

FIRST CHAPTER.

TACTICS FOR THE MARCH.

§ 1. GENERAL PRINCIPLES.

In recent years, that portion of tactics bearing upon marches has been a favorite theme with various military writers. The subject has inspired remarkable treatises, which, especially in our army, have given reputation to several generals of ability. Nothing further remains in this regard but to become imbued in our turn with their ideas, and to profit by the instruction they have put at our service.

Thanks to them, information relative to a proper execution of marches is to-day very general. The changes in theories brought about by progress in the military art have become familiar to all, and in practice great improvements have been realized. It will suffice, then, to briefly sum up the principles already commonly known.

Importance of Marches.—The weighty significance of marches, from a tactical point of view, has been recognized in all times. It is only in armies whose discipline is lax that drills relating to marches fall into disuse. Under pretext of humanity, troops are too often per-

mitted to neglect these exercises in time of peace, and the disastrous consequences of this are seen when they come to take the field, where the meagreness of the results attained is a subject of astonishment and disappointment. Unfortunately they are also a sign of impotence, and almost always the prelude to defeat.

"Slowness and weariness," says Von der Goltz, "characterize the movements of large masses . . . . . But an army which marches better than the enemy has a great advantage over him. This arises from the fact that its chief can always concentrate his forces more quickly than his adversary, and thus strike him with superior numbers."

An army's mobility, then, is at once a pledge of success and a proof of discipline.

"A good estimate," says the same author, "may be formed of the character of troops by the number of stragglers observed during a hard march. It is especially on such occasions that the influence of discipline makes itself felt."

It might be added that the quality of troops as exemplified in marches of different kinds, gives, generally speaking, the measure of their value.

From these considerations, it is evident that marches, particularly those of large units, should be one of the most frequent and most encouraged exercises incident to an army's peace training. Troops inured to fatigue and habituated to the march, are already half prepared for war. This measure of readiness is now much more necessary than formerly, as armies no longer make those marches of concentration which served to temper them for field service.

"It is a matter of importance that the traditions of remarkable marches once executed, still remain alive in the minds of the soldiers. Exertions which previous experience has taught them to regard as nothing out of

the common, are more easily borne than those with which they are entirely unacquainted.

"If the fatiguing exercises and the long marches in time of peace are discontinued, the army will gradually lose correct ideas of what the human frame, inspired by good will, is capable of enduring without serious injury. From year to year, less and less will be required of the men. Officers and soldiers will by degrees become habituated to look upon a comparatively trifling fatigue as something extraordinary, and thenceforth this inconsiderable fatigue will indeed become extraordinary, simply by the effect produced on their minds." *

It seems imperative, then, that armies should be exercised during peace in all kinds of marches that may be demanded of them in time of war—ordinary marches, marches made with numerous columns and those with weak columns, quick marches, forced marches, night marches, etc. In this respect, the results attained up to the present leave still a vast field open to future efforts and improvements.

But the idea set forth most prominently by these considerations, is the necessity of properly regulating marches. A well devised system of tactics for the march has a direct influence upon the value of the forces.

"The *morale* of the troops is affected by the heed and forethought bestowed upon the dispositions for the march.

"Every species of hardship which to the soldier's common-sense way of viewing things appears useless, wearies and irritates him. A necessary hardship, though it be considerable, will, however, be cheerfully borne." †

In all armies, the leaders are alive to the importance

* *The Nation in Arms*, by Major Von der Goltz.

† *Ibid.*

of this truth; and the service of marches has been everywhere fixed with remarkable care. Our regulations of October 26, 1883, were in this regard inspired by the most recent generally-accepted views on the subject, and the profound study made of the question by Generals Berthaut and Lewal. It is not, however, expedient to go into the researches of these authors here in detail. It will be sufficient to set forth the general ideas developed, in treating of the execution of marches.

§ 2. EXECUTION OF MARCHES.

I.—Preparation of Marches.

1ST.—PRELIMINARY MEASURES.

Before putting the forces in motion, the commanding general, through his chief-of-staff, executes a preparatory work, the aim of which is to study the movement as a whole, determine the principal lines of operation, and properly arrange for the march of the columns. One inflexible idea controls him: *To reach the enemy as rapidly as possible, with all available forces, and to deliver the blow at the most advantageous point.*

The preliminary work should lead to the solution of this problem, and consequently comprehend:—

1st. A summary of the information furnished through reconnaissances, and of the instructions to be given on this subject;

2nd. Determination of the front of march, which should correspond to the greater or less distance of the enemy;

3rd. The number and kind of columns, according to the end proposed and the number of roads at disposal;

4th. Apportionment of the daily rates of travel in keeping with the length of the columns and the nature of the ground;

5th. Establishment of the zone of march of each column;

6th. The method of provisioning the forces, having in view the resources of the country; the march of supply convoys and movable magazines;

7th. The dispositions to be made for assuring the protection of the flanks and rear.*

2ND.—ORDERS FOR MOVEMENTS.

This work finished, the orders for the movements have only to be written out and dispatched.

This subject has already been discussed in the first part of this work, when strategic marches were under consideration. The examples there cited clearly attest that the orders for marches should be short, and limited to the action of the particular unit addressed. They moreover establish, generally, that orders in the case of corps and divisions should embrace:—

A brief statement of the situation;

The movement to be executed;

Special instructions.

Directions so completely eschewing particularization are, however, applicable only to armies in which the details of execution are governed by a uniform tradition, and in which the custom prevails of freely exercising individual discretion throughout all the grades of the hierarchy. With masses so large as those composing modern armies, this simplification of orders, and the adoption of this rule respecting the initiative, have become a necessity.

But when the subordinate awaits from his chief a specification of the circumstances which must justify a particular march, and a statement of its various incidents, simplicity in orders becomes impossible. It is especially necessary in such a case, that they be com-

* General Berthaut, *Principles of Strategy.*

plete; that a means be found of giving them clearness without neglecting a single indispensable direction on the subject of the movement of the particular force in question, its means of security and method of supply.

In this part of the service, progress is no doubt in the direction of simplification. The Germans have given us the example, and it may be safely said that one of the conditions of an army's fitness for military operations, in the present day, is brevity of orders.

3RD.—ORGANIZATION OF THE COLUMNS.

The results of marches depend especially upon the organization of the columns; and this feature itself, upon the aim of the movement, which is to reach and attack the enemy.

The columns should then be formed in such wise that their elements may pass to the combat order with the greatest possible celerity. The position of these elements in the column, therefore, is determined by the greater or less urgency of the demand for their appearance upon the battle-field.

To be certified that the column marching alone may preserve its independence of action, it is first of all requisite that it receive information betimes concerning its surroundings.

This initial requirement of the movements of grand units has given rise to the organization of a reconnaissance service.

Cavalry, with the aid of artillery, is alone fitted for such duty; and it will be seen further on, that the length of the column has an influence upon the distance to which the troops engaged in this service should be pushed.

4TH.—PROTECTION OF MARCHES.

It is essential then that the columns should be protected in all directions. Hence arises the necessity for advanced-guards, rear-guards, and flankers.

It is generally recognized that the advanced-guard should be strong enough to arrest the enemy, compel him to display his forces, and give the remainder of the column time to deploy. From this results the obligation to compose it of troops of the three arms of the service, and of distributing these different elements according to the principles adopted for the combat formation. Similar considerations have fixed the size of the advanced-guard at a third or a fourth of the strength of the column, and given the means of determining the distances which should separate the different parts of this force, and the interval between it and the gross of the troops.

On this subject it is important to note a tendency which has of late manifested itself in Germany.

According to Von der Goltz, "Experience in the last wars has demonstrated that often the main body's opportunity for deployment is put to flight by the pressing necessity of supporting the advanced-guard, arduously engaged with a superior enemy, which requires the troops to be precipitately pushed into action according as they arrive."

Again, it has been said that with strongly organized advanced-guards, their commanders, impatient for distinction, have sometimes brought on combats without orders from their chiefs, thus depressing the latter's freedom of action. Consequently a reduction in the strength of advanced-guards, especially as relates to the infantry, has been advocated.

They should be composed almost exclusively of cavalry and artillery, as being the most suitable arms to ascertain if the obstacle be serious, gain time necessary for the deployment of the main body, and break off the combat if the general commanding the column so orders. The infantry should furnish but a single battalion for the advanced-guard of a division or even of a corps.

The most serious inconveniences seem however to arise, not from the strength of the advanced-guards, but rather from the excessive initiative exercised by their commanders.

For our army, it will continue customary for advanced-guards to play a rôle of protection and reconnaissance; but their action should in no case fetter the will of the commander of the column. The conduct of advanced-guards will depend then upon the decisions of the latter, and it should be such as in case of need, to afford him time to decide upon a course of action.

The composition of rear-guards and flanking bodies has likewise been regulated by the duties incumbent upon these detachments.

Finally, the organization of the remainder of the column completes the normal disposition for the march.

The principles on which it rests are drawn from the exigencies of modern combats.

There is one arm which is indispensable in opening the action: it is the artillery. Logically it ought then to march immediately after the cavalry charged with the service of reconnoitring. But if the latter is obliged to fall back, and is pursued, the batteries will be surprised while yet in the march formation, and out of condition to defend themselves. It is necessary then to provide them with supporting troops. Thus it has been the custom to place in front of the artillery in the column, an infantry force sufficient for its protection.

The increased importance of artillery to-day in opening combats, in giving direction to the fire, in determining the decisive point, and in preparing for the attacks, has produced a marked tendency to place masses of this arm at the heads of the columns.

But in this disposition there is a limit. It is fixed by the length of the artillery in column. If the batteries marching in the front are too numerous, the infantry in

their wake will not be able to deploy in time. The artillery of a corps occupies an extent of about 1.9 miles. If it forms the first fraction of the main body, three-quarters of an hour will be required by the infantry following it to reach the scene of combat. In the meantime the corps commander will be obliged to maintain the action with his advanced-guard and his batteries.

Before an enterprising and outnumbering enemy, this situation would present danger. As a consequence, the position usually fixed upon for the corps artillery in column, is between the two divisions.

Similar principles control the formation of the remainder of the column. And it is generally recognized that the various elements should be placed in the following order:—

Troops;
Combat trains;
Ambulances;
Regimental trains;
Convoys.

It is unnecessary to enlarge further upon this subject here. Additional details may be obtained by a reference to the regulations of October 26, 1883.*

II.—Execution of the Movement.

The marches of grand units could not be made to fulfil the end proposed without a rigorous application of the principles relating to the duration and accurate adjustment of the movements, and to the depth of the columns,—in a word, to the practical conditions of their execution. It is indispensable, then, to become acquainted with these principles.

* See decree of October 26, 1883, giving regulations for the service of armies in the field.

1st.—DURATION OF MARCHES.

In his *Tactics for the March*, General Lewal sets apart his first two chapters to show that reason and experience move together in requiring marches to be submitted to fixed principles.

This opinion has been entertained by all great warriors. Frederick II. and Napoleon have in this regard left advice whose title to respect remains undiminished. Especially have they bequeathed to us remarkable examples of marches made in accordance with the tactical dispositions of the times. In their day, the necessity of submitting all the operations of war, particularly marches, to previous calculation, was universally recognized.

Marshal Soult thus expresses himself on this subject:

"Well-calculated enterprises are the only ones that, properly, should be undertaken; and even then the results may fall short of expectation. Who in war has not beheld the best dispositions stranded by accidents which it was impossible to foresee! Thus the death or capture of a leader, a storm which has swelled the torrents and suddenly arrested the march of a force, an unexpected reinforcement received by the enemy, and a multitude of other incidents, have arisen to derange the best laid plans.

"However, in the long run and in the majority of cases, calculation will prevail over chance.

"Thus a leader who assumes a responsibility should not take counsel of chance. He should weigh everything, calculate everything. What is called inspiration is only a rapid calculation." *

General Lewal's regulating principles, like Marshal Soult's calculations, are in reality but the fruit of experience.

---

* General Pierron, *Méthodes de Guerre.*

They rest upon mathematical data, which give them a character of exceptional precision and stability. They are laws which it is necessary to understand and to know how to apply.

The Germans adhere to the general principles of march which guided their forefathers. With them it is not a question of official regulations, but simply of traditions corrected by practice and modified after each campaign, conformably to the progress made in the military art. They hold to-day, as formerly, that it is always necessary *to divide for the march and concentrate for the battle.* But when their movements are studied, it is seen that on the whole they make but a slight dispersion of forces, and that the columns on the march are always in such proximity that the armies can put themselves in readiness to engage within twenty-four hours.

We observe also that the progress of their armies depends upon the march of the grand units, especially of army corps and infantry divisions. It is then in relation to the movements of these units that the application of the rules in the case may be justly estimated. In war it seems that one consideration is never absent from the minds of their leaders,—the length of the columns. They never forget that according as the column increases in extent, the troops become more and more fatigued, and have fewer cantonment and supply facilities.

The duration of marches, and in a certain measure their proper execution, depend then upon the depth of the columns.

The latter is estimated in accordance with the following data.

2ND.—DEPTH OF THE COLUMNS.

In Germany, a division of infantry with its combat train occupies a length of . . . . . 5 miles.
The same with its regimental trains . . . 6.8 "
With its convoy . . . . . 11.2 "
An army corps with its combat trains . . 12.7 "
With its regimental trains . . . . . 17.4 "
With its convoy . . . . . 29.8 " *

It seems that these figures do not take into account the variable distances which should separate the troops. By allowing for these, Major Von der Goltz estimates the depth of the corps column with its combat train at about 18½ miles.

In France, these data have been fixed upon similar bases. Allowing for a lengthening of one-fourth in case of infantry, cavalry, and artillery, and of one-half for convoys, the extent of the combat column in case of an infantry division, including the distances between the various groups, and that separating the advanced-guard from the main body, has been officially estimated at 8.7 miles. For an army corps, from the head of the advanced-guard to the rear of the main body, not including the munition sections, 16.6 miles.†

3RD.—RATE OF MARCH.

For columns few in number, 80 metres per minute or 4 kilometres per hour, including the horary halt, appears to be the rate generally adopted.

For strong columns, 72 metres per minute or 3.6 kilometres per hour [about 2¼ miles], is recognized as the proper speed.

With poor roads the rate is reduced to 60 metres per minute, or 3 kilometres per hour.

---

*Colonel Blume, *Strategy*.

†See *The Staff Guide*.

4TH.—LENGTH OF DAILY MARCH.

The Germans consider a space of 3 [German] miles, which is equal to 22,224 metres [13.8 English miles], as the mean length of daily march for a corps. For convenience of reference, this distance may be set down at 22.5 kilometres.

In France, General Lewal has favored the adoption of 22 kilometres. A daily march of 24 kilometres [about 15 miles] appears to him the maximum.

In Germany, it is recognized as a law founded upon the necessities of actual practice, that every third day should be allowed as a day of rest to troops covering these distances.

Experience has moreover shown that under favorable conditions a daily march of 22.5 kilometres is generally executed by—

The infantry division at the head of the column in	6 hours.
The infantry division in rear	7 "
An army corps	13 "
A cavalry division	4 "
The corps artillery	in from 4 to 5 "
A section of the train	in 6 "

By adopting these figures, the Germans count upon a speed of 62 metres per minute, or 3720 per hour.

Numerous facts developed in the last war, go to prove that an army corps can very conveniently make a daily march of 22½ kilometres, which is at the rate of 3 kilometres [about 1.9 miles] per hour.

In this connection the march of the II. Prussian Corps on the 18th August, 1870, has often been cited.

This corps left Pont-à-Mousson at 2 o'clock A. M. on the day of the battle of Gravelotte, in order to take part in the action. It arrived at Buxières at 11 A. M., having marched 22½ kilometres in nine hours, or, allowing for rest, at the rate of 3½ kilometres per hour.

The data relative to the length of the daily march of

grand units involve, moreover, practical consequences which it is useful to recall.

At a mean rate of speed, an army corps setting out at 6 o'clock in the morning will not complete its march, according to what has already been said, until 7 in the evening.

As a result, if two corps march on the same road to reach the same objective, one of them must move at night.

Moreover, if it were desired to compose the corps of three divisions, it would be impossible to bring them together in the same cantonment in a single day's march.

So far as possible, the distance before mentioned, 22 kilometres, should on an average be accomplished daily.

Under the First Empire, the mean rate of march was from 24 to 25 kilometres [between 14 and 15 miles]. But in 1859, during the Italian campaign, it fell off to 15.27 kilometres; nor was it greatly raised in 1870, for it did not then exceed 16.26 kilometres [about 10.1 miles].*

The average rate of march of the German armies in 1866 and 1870 was as high as 22 or 23 kilometres [about 13¾ miles].

This has reference to the mean march of the grand masses. But in the field, the necessity often arises of exceeding this distance, or of resorting to quick or forced marches.

5TH.—FORCED MARCHES.

In Germany, as in France, the term *quick marches* is applied to those of from 23 to 30 kilometres, executed by infantry divisions or army corps during several consecutive days without pause.

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*General Lewal, *Tactics for the March.*

On this subject, the Germans often refer to the march of the IX. Prussian Corps from the Moselle to the Loire in 1870, executed from the 8th to the 17th of November, the troops taking no rest.

Major Von der Goltz cites another example of a quick march:—

The 14th Regiment of Prussian Infantry accompanied the convoys and artillery of the II. Corps, on the way from Metz to Paris, from the 4th to the 16th of November, 1870, without resting a single day. It made thus 193 miles in 13 days, that is, was able to maintain a mean daily rate of between 14 and 15 miles for nearly a fortnight.

Forced marches are those executed without other thought than to bring to the designated point the greatest possible number of men in condition to fight.

On the 16th of August, 1870, the X. Prussian Corps thus resorted to a forced march of about 23 miles for the purpose of taking part in the battle of Rezonville.

The II. Corps on the 18th reached the battle-field of Gravelotte at about 5 P. M., after having traveled between 23 and 24 miles with the utmost speed. It entered the action immediately, and was engaged until night-fall.

The Germans give another example of extraordinary marches,—that of the IX. Corps during the 16th and 17th of December, 1870.

On December 15, this corps was cantoned at Blois. During the night, instructions were given it to move rapidly upon Vendôme.

Setting out on the morning of the 16th, it crossed the Loire, and took the road to the point indicated, in the wake of the X. Corps.

While *en route* an order was received to turn toward Orleans, and reach this place not later than the next night.

"At 3 P. M.," says the Russian General Zeddeler, "the IX. Corps began the movement, upon two roads. At 2 A. M. it reached Beaugency. Darkness had come on at 5 o'clock in the afternoon, and at 7 a fine rain began to fall, lasting throughout the night. The roads, broken up by the rain and by the constant passage of troops, were in a very bad state; the way was strewed with the carcasses of horses; at many points the march was retarded by collisions with the train columns of the X. Corps and the 17th Division moving toward Vendôme. All these unfavorable circumstances delayed the forced march of the IX. Corps.

"However, its heads of columns reached Orleans at 2 o'clock in the afternoon. At 8 in the evening, the entire force was concentrated in this city and the vicinity, the van of the column having thus traveled 51 miles in 33 hours and the rear in 36, including the night rest and that at the village of Chapelle."

According to General Lewal, the unfavorable conditions under which this march was executed, led to a lengthening of eight-ninths in the column.

The history of the French Army offers us examples of marches more remarkable still. The heroic effort made by the Masséna Division in 1797, in the Rivoli campaign, remains without a parallel.

After having fought before Verona during the day of the 13th January, it started forth at 10 o'clock at night, led by Bonaparte, marched 7 leagues to Rivoli and fought during the entire 14th. In the evening it again set out, moving upon Mantua, 14 leagues distant, marched all night and the next day, passed the second night in the presence of the enemy at La Favorita, and at break of day of the 16th took part in the glorious battle of this name.

The Masséna Division had thus marched and fought for four consecutive days without pause. Bonaparte

was therefore warranted in writing with pride, that his soldiers had surpassed the so much vaunted rapidity of the Roman legions.

The Napoleonic epoch furnishes us many other examples of extraordinary marches intermingled with brilliant combats.

One of the most celebrated was that executed by Murat with his cavalry upon starting in pursuit of the Prussian army after Jena.

He first overtook Prince Hohenlohe at Prentzlau, then Blücher at Lübeck, after which he marched to Berlin, incessantly harassing the Prussians that had been able to escape him. Turning then against the Russians, he advanced as far as Posen and Warsaw, entering the last-named place November 30, 1806, after having traveled 865 miles in 45 days, or between 19 and 20 miles a day for a month and a half.

Night Marches.—The subject of marches would not be fully considered without a word respecting those executed at night. They have always been regarded as exercising an injurious influence upon the health and spirits of the men, as diminishing the vigor of the horses, and as producing a baneful effect upon discipline. Their speed is less than that of day marches, and during their execution it is rare that all the directions for the march can be rigorously carried out.

Such is the character of night marches. These are facts of experience, and need not be enlarged upon. Moreover, all military men have condemned these movements. It is wiser, however, to conclude simply that they are exceptional operations; and it would be wrong to wish to do away with them entirely.

On the contrary, it is necessary to recognize that probably none of the campaigns of the future will be exempt from night marches.

As General Lewal has observed, the proper disposition of the large masses composing modern armies, will often require marches of this cast. An army corps which at 4 o'clock in the afternoon is directed upon a position 12 or 13 miles distant, will be obliged to make the most of its march by night. And in war the circumstances requiring the immediate movement of a grand unit to a new position at any hour, are very numerous.

All armies that have taken part in wars of magnitude have been obliged to resort to night marches, and their leaders have never been stopped by fear of the disorder or fatigue that might result therefrom.

Military operations of our day go only to confirm this view. In many cases it seems that tactical manœuvres have been executed by night, which if attempted during the day would have encountered insurmountable obstacles.

We know that in 1870 various German corps executed the night marches demanded by the situation without hesitation, disorder, or diminution of speed.

In this regard, a body of French partisans gave us the measure of the effort that may be demanded of troops without exceeding their power of endurance. Commandant Bernard, at the head of the chasseurs of the Vosges stationed at Langres, resolved in January, 1871, to blow up the bridge of Fontenoy, upon the principal line of communication of the German armies. He set out from Lamarche, 31 miles north of Langres, on the evening of January 18th, with 1100 men, by rough cross-roads and in bitterly cold weather, traveled from 23 to 24 miles, and halted for the day and night of the 19th, during which the command was disturbed by an alarm.

On the evening of the 20th, he resumed his march, with only 300 men however, and traveled 18½ miles, sometimes across fields and again through woods, in an

intricate mountainous country. During the night of the 21st, he made a march of 23 miles, crossed the half-frozen Moselle, and at daybreak attacked and dispersed the feeble guard at the bridge of Fontenoy-sur-Moselle, blew up this bridge after a work of several hours, and without resting started back to Lamarche, which was reached on the 26th.

His expedition was entirely successful, and he had been enabled, thanks to his night marches, to avoid the numerous patrols of the enemy then scouring the country.*

But this, however, was only the march of a detachment. Here the difficulties of execution arose, not from the number of effectives, but from the character of the ground and the state of the weather; while in other situations, we shall see brigades, divisions, corps, and even entire armies, forced to set themselves in movement at night for the execution of unexpected operations. Such occasions will perhaps press into view more frequently in future than has hitherto been the case. They are liable to arise in every war. As an example, let us revert to the campaign of 1866.

Night March of the Prussian Armies, July 2, 1866.—On this day, the I. Prussian Army and the Army of the Elbe stood upon the line Smidar-Horitz, with headquarters at Kamenitz and Hochwesely. They had received orders to move out the next day toward Pardubitz and execute the flank march referred to in the first part of this work. There was no change in the situation up to 6 P. M. At 7, Prince Frederick Charles learned that four Austrian corps, supposed up to this time to be behind the Elbe, were really posted upon the Bistritz, about

* The Germans avenged themselves for this exploit by acts of bloody cruelty, which are registered in history, and which will never be effaced from the memory.

3¾ miles from his outposts. He was then in the immediate vicinity of the enemy ; the action would probably begin at daybreak ; it was essential to at once take steps to concentrate his forces, in view of the events of the next day.

The commander-in-chief of the group formed by the two Prussian armies, unperplexed by the fact that the generalissimo had arrived within a few leagues of his headquarters, at 9 o'clock P. M. dispatched the following instructions :—

"The I. Army will be formed in order of battle at daybreak to-morrow, ready to attack the position on the Bistritz at Sadowa, upon the Horitz-Königgrätz road. (*See Plate III.*)

"1st. The Horn Division will take post at Milowitz by 2 A. M.

"2nd. The Fransecky Division will march by Gross-Jeritz to Cerekwitz, and will be in position at the castle there by 2 A. M.

"3rd. The Manstein and Tümpling Divisions will start at 1:30 A. M., under orders of General Manstein, and will be posted in reserve southward of Horitz, the Manstein Division to the east, the Tümpling Division to the west, of the road from Horitz to Königgrätz. It is hoped that these two divisions will be at their assigned stations by 3 A. M.

"4th. In the II. Corps, one division will be directed upon Psaneck, the other upon Bristau. Both will be in position at these points by 2 A. M.

"5th. The Cavalry Corps will have its horses saddled by daybreak, and will remain in its bivouacs ready to move out upon the order.

"6th. The Reserve Artillery of the army will advance as far as Horitz ; the Reserve Artillery of the III. Corps will be established astride the road from Horitz to Miletin ; the Reserve Artillery of the IV. Corps, astride the Horitz-Gitschin-Libonitz road.

"7th. General Herwarth I. will march with all his disposable troops to Nechanitz, reaching this place as early as practicable.

"8th. H. R. H., the Crown Prince, has been requested to post two of his corps in front of Josephstadt, and to direct a third upon Gross-Bürglitz.

"9th. The troops should establish connection between themselves as quickly as possible; the right wing should then link with the forces of General Herwarth I., the left, with those of the II. Army.

"10th. The trains, etc., will move at daybreak to the following stations, and will be parked *at the sides* of the roads:—

"Those of the 5th Division, to Masowitz, eastward of this village;

"Those of the 6th Division, to the right bank of the Jaworka, beyond Belohrad;

"Those of the 7th Division, to Suirkowitz, westward of this place, passing through Domoslawitz;

"In the II. Corps, the trains of the 3d Division, which are at Wostromer, will proceed as far as Wojitz, upon the road from Horitz to Gitschin;

"Those of the 4th Division, now at Aujezd-Silvara, etc., will take post at Sobsitz, to the west of the village;

"Those of the Cavalry Corps, to Chomutitz;

"Those of the Reserve Artillery of the III. Corps, to Chotec, eastward of the village;

"Those of the Reserve Artillery of the IV. Corps, to the right bank of the Saworka, passing through Wostromer.

"11th. From daybreak on, I shall be at Milowitz.

"*The General of Cavalry.*

[Signed] "FREDERICK-CHARLES."

The order addressed to General Herwarth was in the following terms:—

"The I. Army will be formed in order of battle at

daybreak to-morrow for the attack of the position of the Bistritz at Sadowa, on the Horitz-Königgrätz road. General Herwarth will move forward with all his available forces to Nechanitz, reaching this place as soon as possible. At the commencement of the engagement, I shall be at Milowitz.

"Report to me as early as practicable the hour you reach Nechanitz, and in what force.

Signed: "FREDERICK CHARLES."

General Herwarth received this at 12:30 A. M., and immediately issued the following order:—

"The Austrians still hold the line of the Bistritz and the Horitz-Dub-Königgrätz road. The I. Army will attack them upon this road to-morrow at daybreak. The Army of the Elbe will move against their left flank, the general direction being towards Nechanitz.

"The divisions will start at 3 A. M., taking with them only ammunition and medicine wagons, and empty carts filled with straw for the wounded. All other wagons will be left at the places of bivouac.

"The Schoeler advanced-guard will march upon Nechanitz by way of Skriwan, Kralic, and Kobilitz.

"The Canstein Division will set off toward Nechanitz *viâ* Neu-Bidsow and Praseck; it will hold Neu-Bidsow until the arrival of the Rosenberg Division, and will cover the right flank, throwing out patrols toward Chlumetz.

"The Münster Division will start at 3:30 A. M., will cross the Jaworka at Smidar, and move by Podolib on Lodin, whence it will, according to circumstances, turn off in the direction of Mzan, or continue on by way of Sucha or Nechanitz.

"The Etzel Division will pass at Smidar, and follow the road taken by the Schoeler advanced-guard.

"The Reserve Artillery will move out at 3:30 A. M., and will at first follow the Etzel Division; then, having

reconnoitred the roads at an early hour, it will, if from the result of the reconnaissance it is possible to do so, follow the Münster Division to Nechanitz; otherwise, it will continue in rear of the Etzel Division.

"The Rosenberg Division, setting forward at daybreak, will move from Kopidlno to Neu-Bidsow.

"The headquarters will march with the advanced-guard. Signed: "HERWARTH."

These orders were received by the divisions of the I. Army and the Army of the Elbe between 1 and 2:30 A. M. The night was dark and stormy, and the roads had been rendered almost impassable by the continuous rains of the last few days. The columns were formed, nevertheless, and put in march; but they advanced only with extreme slowness.

In the I. Army, the 4th Division did not finish its deployment at Bristan until about 4 A. M.; and the Réserve Artillery of the II. Corps was not completely in line until 5 A. M. All the divisions reached their assigned places between 5 and 6 A. M. In brief, the line marked out by Frederick Charles was occupied at this time, and at 6 o'clock he gave orders to move forward.

The distances traversed during this night march were as follow :—

I. Army.

	Miles.
3rd Division (Werder) from Aujezd to Psanek	6.2
4th " (Herwarth) from Wostromer to Bristan	6.2
5th " (Tümpling) from Miletin to Horitz	4.3
6th " (Manstein) from Dobes to Horitz	2.5
7th " (Fransecky) from Horitz to Cerekwitz	5.6
8th " (Horn) from Gutwasser to Milowitz	1.55

Army of the Elbe.

Advanced-guard from Hochwesely to Nechanitz	13
14th Division from Zeretitz to Lodin	12.4
15th " from Cesow to Nechanitz	15.5
16th " from Jicinowes to Nechanitz	18

In point of distance the movement is then of little importance. But what it exhibits to view especially, is the unexpected obligation arising on the night before a great battle and during extremely unfavorable weather, to break in upon the sleep of soldiers already fatigued by recent marches and combats, and to forthwith put two entire armies in movement, in order to engage them at daybreak in a murderous struggle that was to continue until nightfall.

Nor is this an entirely exceptional case; for similar circumstances are liable to arise at any time during a campaign, calling for like movements.

Did we not see the Russian army in 1877 obliged to make a night passage of the Danube, and engage first a division, and then a corps upon the opposite bank, until the middle of the following day?

"The possibility of being compelled to make night marches is then well established," says General Lewal, "and it is of importance, indeed, that they should be possible, since they are necessary, indispensable even."

As to the methods of executing them, there is evidently no change required in the usual rules governing marches.

Circumstances can alone indicate at what points the service of protection should be strengthened. In general, and contrary perhaps to the usually accepted ideas on the subject, the surveillance and exploration rôles should, if possible, be more fully developed during the night than in the daytime.

"At night, amidst the darkness, one is deprived of an important source of information—the discernment of objects at a distance. Then, sight is, so to speak, replaced by the senses of touch and hearing. It is necessary to be in contact with men and things to be able to recognize them. It is therefore more difficult to inform one's self in the dark. Consequently the means

of intelligence should be greater then than during the day.

"All that has been said in preceding paragraphs with reference to advanced, flank, and rear guards, the provost service, and the first echelon, applies in no less a degree to marches executed at night. The service of security is then of greater importance, as errors, misapprehensions, and surprises, present greater dangers."*

What conclusions are to be drawn from these facts and observations, if not that night marches are a necessity, and that it is expedient to practice them during peace?

6TH.—DELAYS DURING THE MARCH.

In the field, a multitude of incidents concur to impede the progress of troops on the march.

The passage of defiles is one of the most frequent causes of delay. It obliges armies to contract the front of the columns, thereby producing a stoppage. It is necessary, afterwards, for the foremost troops to slacken the pace upon issuing from the defiles, otherwise there will be a lengthening of the column and losses of distance.

Bridges are the defiles most usually encountered, and the delays which they occasion vary according to the manner of their construction.

We know, for example, that the speed of passage is less in case of ponton than of fixed bridges, the march of men and horses being retarded by the vibrations of the structure. It has been estimated that on this account, the time of transit is increased by one-fourth.

In case of suspension bridges, the difference is still more sensible: the danger of rupturing the cables, and the oscillations of the road-way, oblige the employment of prolonged intervals between the various subdivisions.

*General Lewal, *Tactics for the March.*

These facts have been repeatedly verified.

When the V. Prussian Corps, on 18th September, 1870, made use of the ponton bridge thrown over the Seine at Villeneuve-Saint-Georges, an entire day was required for the crossing, although it was made without either baggage or convoys. This bridge was only 120 metres long.

On the 16th August, 1870, the XII. German Corps (Saxon) was to cross the Moselle at Pont-à-Mousson.

The corps commander directed that exact note be made of the time occupied by the different units in effecting the passage, with the following results:—

The 23d Division, having a strength of 15 battalions, 4 squadrons, 24 guns, and a detachment of litter-bearers (13,189 foot soldiers and 638 mounted men), required 2½ hours.

A delay occurred during the crossing on account of the necessity of repairing a leaky ponton.

The Cavalry Division, composed of 16 squadrons with 6 guns (2287 men), crossed by the stone bridge in 1 hour, 20 minutes.

The Corps Artillery, 42 guns, 9 munition sections, and 370 wagons, made the passage by the stone bridge in 2 hours.

The 24th Division (13,199 foot soldiers, 616 mounted men, and 24 guns), did not cross until the afternoon. It made use of both bridges at the same time.

The baggage did not begin the passage until late in the evening.

The bridges were 140 metres in length.

It may be concluded from this example that an army corps having to make the passage of a river 140 metres [about 153 yards] wide upon two bridges, will occupy more than a day. The movement of the XII. Corps had commenced indeed at 7 A. M.*

* General Pierron, *Méthodes de Guerre.*

On the same day, the 6th Cavalry Division (20 squadrons with 6 guns) crossed the Moselle at Corny upon a suspension bridge. The oscillations obliged the horsemen to dismount, and march in column of files. The passage required over 2 hours for 2,570 men.

It is a fact of experience, moreover, that in case of suspension bridges, the rate of crossing is diminished to three-fifths of a mile an hour.

This result is confirmed by calculation.

We know, indeed, that upon bridges of this character, it is advisable to cross the infantry in groups of from 40 to 50 men; the cavalry, in column of files; the four and six-horse wagons, singly; the light wagons, by threes and fours. In case of need, an addition may be allowed of one or two mounted men per wagon.

Restricted by these conditions, a division of infantry with 4 squadrons and 6 batteries, having to cross the suspension bridge at Villeneuve-Saint-Georges, 120 metres long and 4½ wide, occupied in case of the combatants alone, 9 hours and 35 minutes, or counting unavoidable delays, 10 hours. Taking the baggage into consideration, the movement required 12 hours.*

It is recognized that, in general, the rate of crossing in case of suspension bridges is one-fourth the mean rate of march on ordinary roads.

Manœuvres are, however, for grand units, the principal cause of diminished speed.

To make a new disposition, an army corps on the march must first of all take the time necessary for the communication of the order, or 2 hours on an average.

The deployment of an infantry division abreast of its advanced-guard requires 1¾ hours, or with fuller allowance, 2 hours; and the same in case of a corps, 5 hours. The ployment into column of march requires equal

* General Pierron, *Méthodes de Guerre.*

periods; and if the baggage accompanies the troops, this operation, in case of the corps, will occupy 11 hours.

As a result of these facts, an army corps cannot escape an encounter with the enemy if at a distance of but 5 leagues from him.

It is necessary then:—

1st. That it be protected to a greater remove to the front than 5 leagues, by a strong advanced-guard;

2d. That the baggage be held at from 20 to 24 kilometres, or a day's march, in rear, so that it may not interfere with the movement of the combatants.

Experience has more than once proved how dangerous it is to leave the baggage upon the battle-field.

At the battle of Tudela (1808), the Spaniards had parked their baggage in two lines, in rear of the city, at a little distance from the scene of combat. Hence, when victory appeared to decide in our favor, General Castaños, who was in command, gave orders to direct the trains upon the road to Saragossa, by which he intended retiring. But once the retreat had begun, the ardor of our troops led to such a vigorous pursuit, that the Spaniards, in an instant, lost all their baggage, provisions, and munitions.

This misfortune would not have befallen them had they held their baggage 3 or 4 leagues in rear of Tudela, for example at Alagon, behind the canal.*

General Marbot concludes from this example, that "it is necessary to always leave the bulk of the baggage at a distance of a march or a half-march in rear, when the troops are liable to engage; and that an army should be accompanied to the battle-field by only the munition wagons, the light ambulances, and the spare horses of the general and field officers, or, at the most, by a quarter of its equipage."

* General Pierron, *Méthodes de Guerre.*

This is sufficient to demonstrate the necessity, well recognized to-day, of dividing the different trains of army corps into—

Combat trains, comprising the led horses. the munition wagons, hospital-supply wagons, etc.;

Regimental trains, comprehending the baggage, provision, and sutler wagons, the munition sections, the reserve ambulances, the convoys, and parks.

It also shows that it is advisable to arrange them, according to their importance, in the rear of the columns, and in case of meeting the enemy, to hold them at a considerable distance.

We further see, from what has already been said, that in order to execute a flank march in the vicinity of the enemy, the corps should be at a greater distance from him than 5 leagues; for should it have only one road at disposal, he will be able to fall upon it before the completion of its manœuvre, and it will thus be obliged to accept battle under unfavorable conditions.*

The delays incident to the employment of long columns have an influence upon concentrations which should not be passed over unnoticed.

Experience has shown that a corps marching upon two roads 5 miles apart, will always be able to concentrate upon the advanced troops more quickly than one moving in a single column.

These considerations have a still greater importance in case of the march of entire armies. They oblige such forces to secure at least one road to each corps. The necessity of utilizing the greatest possible number of roads, shows that in taking the offensive against an enemy several marches distant, it is useless to effect a preliminary concentration.

This takes us back to the subjects, already considered to some extent, of fronts and zones of march.

* General Pierron, *Méthodes de Guerre.*

"In order that an army may be able to concentrate in two days, upon any point of its front whatsoever, it is essential," says Blume, "that the extent of this front should not exceed from 23 to 28 miles, and that not more than two corps should march upon the same road. In consequence, an army of 5 or 6 corps should be disposed upon at least three roads.

"If it is desired to concentrate an army still more rapidly, the front and depth should be diminished. In this case it is necessary to abandon the idea of utilizing only good roads for the march, even in the best cultivated countries. And it is further requisite to determine to rely but little upon the local resources for provisions and the means of cantoning. Moreover, the supplies carried by the convoys can only tardily be brought forward for distribution to the troops."*

It is evident, then, that the extent of an army's zone of march will depend upon the greater or less probability of a concentration, or, better still, upon the distance to which it is protected in front and on the flanks.

We thus reach the conclusion that an army, in order to march and subsist without too much difficulty, should maintain an efficient reconnoitring and covering service at a distance of at least two marches.

If an army moving upon an extended front should at the end of a day's march observe the enemy at a distance of 15 kilometres [9½ miles] from its flank, *it would no longer be in condition to meet his attacks with all its forces.* Even had it the numerical superiority, it would not be able to profit therefrom. The commander would be bridled in his designs, and his liberty of action thus suffer serious abridgment. He could no longer think of retreat, since, as we have seen, the proximity of the enemy would prevent him from slipping away.

* Colonel Blume, *Strategy.*

"An army commander who finds himself in presence of an enterprising and energetic adversary, if he wishes to be secure in his movements, should regulate the dispersion of his forces according to the distance to which the covering cavalry is pushed. Before this distance may safely be reduced to the length of a single march, in consequence of the attack or resistance of the adversary, the army should, if ignorant of his strength and intentions, so close up its masses on the menaced side as to be able to bring sufficient forces to bear in this direction in the space of a day."

From these observations we may conclude that the undue lengthening of the columns, or the accumulation of several grand units upon the same road, is one of the causes of delay which should be the most solicitously guarded against. Experience has proved that heedlessness in this respect is liable to entail disastrous consequences.

The history of contemporaneous wars offers us more than one example of operations which have failed in their object, in consequence of the excessive depth of the columns. The most striking, perhaps, is that furnished by our Army of Metz in 1870.

7TH.—MARCH OF THE FRENCH ARMY FROM METZ TOWARD VERDUN IN 1870.

Upon the repeated demands of the Emperor Napoleon III., Marshal Bazaine, on the 13th August, 1870, decided to retreat upon Verdun, with the Army of Metz. (*See Plate I.*)

In this behalf, he addressed to his chief-of-staff, General Jarras, the following order:—

"13TH AUGUST.

"General Jarras will, with the concurrence of General Coffinières, assure himself that the principal arteries of

* Colonel Blume, *Strategy.*

Metz leading to the two bridges in the city, are this afternoon clear for the passage of the baggage of the Guard and of the 3d Corps, as well as that of the Reserve under General Canu. This equipage will be removed to Ban-Saint-Martin; and in this view General Jarras will give orders to the Forton and Du Barail Divisions to leave their camps at about 1 P. M. Their baggage will remain at Ban-Saint-Martin, and take its place in the convoy, to the end that the divisions may be as light as possible. The Forton Division will follow the Verdun road, by way of Mars-la-Tour; the Du Barail Division will take the road leading to Verdun by Doncourt-les-Conflans. They will reconnoitre in front and upon the exposed flank, and establish connection between themselves. Both will take post at Gravelotte should sufficient water be found there; otherwise, one will remain at this place and the second proceed to Rezonville. They will distribute two or three squadrons in front and upon the right and left, in such wise as to well cover the ground and permit the troops to debouch later.

"General Jarras will also notify the parks of all the corps to put themselves in motion when it is ascertained that the convoys of the 2d and 4th Corps have started. These parks and the convoys of their corps will be held together, the parks in advance. To this end the positions to be occupied should be previously examined, in order to ascertain if they are suitable for the accommodation of these trains. Should they prove insufficient, the parks are to follow the movements of the troops.

"Orders were dispatched to the 2d and 4th Corps early this morning. They are about to be issued to the Guard and the 3d Corps. General Jarras will notify the 6th Corps.

"The 2d and 6th Corps will dispose their convoys between Longeville and Moulin-les-Metz. Those of the 4th will be placed to the left of the bridges, toward

Maison-de-Planches. The 3d Corps, the Guard, and the Reserve under General Canu, will dispose their convoys at Ban-Saint-Martin.

"The 2d and 6th Corps will take the road for Verdun *viâ* Mars-la-Tour, Harville, and Mauheulle; the 4th and 3d will advance by way of Conflans and Étain; the Guard will follow the 3d Corps, or will execute whatever orders may be given it by the Emperor.

"The movement of the troops will probably not commence until evening, by moonlight; if found to be practicable it will begin in the afternoon.

"General Jarras is requested to send an officer to Borny to inform the Marshal if Ban-Saint-Martin will be unobstructed toward 2 o'clock, and if the streets of the city [Metz] will be clear for the passage of the 3d Corps and the Guard.

"As soon as the Marshal has received the reports of the reconnoitring parties, if nothing has been decided upon up to that point, he will apply to the Emperor at Metz for orders.

"But he is not able to predict at what hour this will be possible."

According to this order, the entire army was to march in single column in the defiles forming the road from Metz to Gravelotte, a distance of about eight miles. Beyond the latter place it was to split into two columns, one to move in a northerly direction, the other to the south.

The effective of this army was 176,195 men, on the evening of 13th August. The losses incurred in the combat of Borny, the sick and disabled, and the divisions left at Metz, reduced this number to 152,587 men; and this was the force to be put in march.

In simple formation, that is to say, the infantry advancing by 4's, the cavalry by 2's, and the wagons in single file, the length of this column would reach 226,450 metres [about 140 miles].

In double formation, both infantry and cavalry moving by 4's, and the wagons by 2's, the column would still have a length of 152,236 metres [about 95 miles].*

These figures will suffice to make clear the difficulties which must be met with in the march of such a column, and the impossibility of deploying it for battle.

Beyond Gravelotte, there were upon the southernmost road two corps and a cavalry division, or 53,335 men; and upon that to the north, 99,252 men.

Well-grounded reasons touching the dangers of this operation were submitted to Marshal Bazaine. But he persisted in his project, and the passage of the Moselle not having been effected until the 14th in consequence of rising water, he wrote to the Emperor:—

"I hope that the movement will be terminated this evening; the troops have orders to camp in rear of the approaches to these roads (to Mars-la-Tour and Doncourt), ready to begin the march to-morrow morning."

The Marshal counted then upon bringing his army together at Gravelotte on the evening of the 14th, and disposing it on the next day into two columns. The execution of this movement may with profit be followed in detail.

On the 13th the army occupied the following positions on the right bank of the Moselle:—

The 2d Corps and the Lapasset Brigade were at Mercy-les-Metz;

The 3d Corps at Grigy, Colombey, Montoy, and Nouilly;

The 4th Corps at Mey and in the space between the roads to Les Etangs and Bouzonville;

The 6th Corps was in the forts and near Woippy, upon the left bank;

The Guard was at Plantières in rear of the 3d Corps.

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* General Lewal, *Tactics for the March.*

Let us at first follow the fraction of the army designed to compose the southern column.

Southern Column.—The movement was commenced on the 14th between 11 A. M. and 12 M. by the troops which were to form the column of the south after leaving Gravelotte, that is to say, the 2d and 6th Corps and the Cavalry and Artillery Reserves. Towards 4 P. M., the two corps just mentioned had gained the left bank of the Moselle; but the obstruction caused by the convoys was such that they were not able to pass the slopes of Mt. St.-Quentin.

At daybreak on the 15th the movement was resumed.

The 3d Division of Reserve Cavalry was pushed as far as Mars-la-Tour, arriving there at 9:30 A. M.

It occupied 6½ hours in marching about 12 miles. It should have been able to travel this distance in 2 hours 57 minutes, hourly halts included. After reconnoitring Mars-la-Tour, instead of moving forward, it fell back upon Vionville, where the cavalry of the 2d Corps had just arrived.

The 2d and 6th Corps were established near Rezonville during the morning and afternoon of the 15th; they had marched without any unusual delays.

It is to be noted that our cavalry was only 2.8 kilometres beyond the front, while at the same moment the German mounted troops reconnoitred to a distance of one or two marches in advance of the main forces.

The Guard at Plantières commenced its movement after the combat of Borny, or at about 8 P. M. of the 14th. It did not reach Gravelotte until the evening of the 15th, 24 hours later. The distance traveled was $10\frac{5}{6}$ miles, which should have been covered in 13½ hours. It had, then, to submit to a delay of 10½ hours through the necessity of accommodating itself to the movements of the troops preceding it.

This first portion of the army had taken no part in the action at Borny, and it alone had been able to follow the road indicated. Its effective strength was 73,165 men.

The depth of this column, in double formation, was 62,536 metres; the length of the march being 17,500 metres, we reach a total of 80,036 metres [about 50 miles].

At the rate of 3500 metres [about 2.2 miles] per hour, the normal time necessary to march this distance, allowing for halts, is 26 hours, 22 minutes. The time actually taken was 36 hours. There had, then, been a delay of 9 hours and 38 minutes.

Northern Column.—The 4th Corps commenced its movement at 11:30 A. M. of the 14th. Two divisions were crossing *Ile Chambière*, when, at a little after 3 P. M., the sound of cannon at Borny fell upon the ear. These divisions returned to their positions in the vicinity of Mey, and fought until 8 in the evening, when orders were received to go into bivouac until the troops were rested, and to resume the interrupted movement during the night.

This corps was put in march at 1 A. M. of the 15th, and toward noon assembled its forces at the hamlet of Sansonnet.

A halt was ordered.

A dispatch sent by the corps commander to the general-in-chief acquaints us with these details.

"I considered it imperative," says he, "to hold the positions until 1 A. M., and to then direct the troops toward the bridges of the Moselle. I was scarcely able to get all my forces together by noon."

The 4th Corps had a strength of 32,594 men. In simple formation, this force would give a column of 14¾ miles.

The length of the march was 5⅞ miles.

The normal time for the movement, hourly halts included, should have been 10 hours, 37 minutes.

The time actually employed was 11 hours. We may then consider this march as having been well executed, especially upon reflecting that it was made in part during the night, and almost immediately after a combat; and further, that it was necessary at the outset to make a crossing of a river on ponton bridges.

According to the orders sent from general headquarters, the 4th Corps was to reach Doncourt on the 15th. After the delay occasioned by the combat of Borny, this was impossible. The corps commander contented himself with continuing the march under the most favorable conditions practicable; and in the following dispatch, dated 15th August, informed the general-in-chief of his purposed movements:—

"I intend to put the Lorencez Division in march at 2 o'clock. The remainder of the troops of the 4th Corps will follow at short intervals, but in such a manner as to avoid blocking the roads. Finally, I hope that during to-morrow morning the entire 4th Corps will be reunited at Doncourt."

The single road designated for the movement was found to be very much obstructed. The Lorencez Division was unable to advance. The commander of the 4th Corps then took upon himself to direct this division by the Lessy road. But here also its march was hindered by other troops, particularly the Reserve Artillery, which had preceded it. On the evening of the 15th, the 4th Corps, in consequence of these delays, held one division at Lessy and two at Sansonnet. The movement was resumed on the 16th by way of Sainte-Marie-aux-Chênes, and the van of the corps reached Doncourt at about 12:30 P. M. of this day.

From Mey to Doncourt is a distance of 20½ miles.

Adding to this the depth of the column, and allowing 4 hours for halts, we see that the normal time should have been 27 hours, 44 minutes.

The time actually consumed was 49 hours, 23 minutes.

Here was a delay of 21 hours, 39 minutes.

The principal cause of this tardiness was the clogged condition of the main road.

The 3d Corps setting out on the night of the 14th by the hollow-road leading from Colombey, finished the passage of the Moselle on the morning of the 15th. On the evening of this day, one division was at Saint-Marcel; during this night and the morning of the 16th, two others successively rejoined; the 4th remained near the Moselle, at Maison-de-Planches.

This corps also found it impossible to comply with the order of the general-in-chief; the single road designated being too much obstructed, it was necessary to seek another; hence ensued delays and desultory movements.

The length of the march from Colombey to Saint-Marcel was 21¾ miles. The normal period for the movement may be set down at 24⅔ hours.

The time occupied by the three-fourths of the corps arriving on the morning of the 16th, was 30 hours.

The delay attending the execution of the march by the entire corps was about 11 hours.

Let us review the operation as a whole.

The movement, commenced at 11:30 on the 14th, was scarcely finished by midnight on the 16th; it had then required 60 hours, although several roads had been utilized, contrary to the orders given.

The weaker fraction of the army, which alone had taken the road indicated, was 36 hours in transit. For the entire army to have made the movement as ordered, more than 72 hours would then have been necessary.

A slight calculation will show that in the case of the

formation of the entire army in single column, this time is not at all excessive.

Let us take as the initial point of the movement, the position occupied by the troops farthest advanced in the direction to be followed; that is to say, Ban-Saint-Martin.

From this place to Gravelotte is a distance of 13.2 kilometres [8⅕ miles.]

At a mean rate of 3.5 kilometres [about 2.2 miles] an hour, the head of column should have made this march in 4 hours, 13 minutes.

In simple formation, the column having a depth of 226,450 metres, the last forces would require 74 hours, 56 minutes, to reach their place of bivouac.

In double formation, or with a depth of 152,236 metres, the rear of the column would occupy 47 hours, 33 minutes in the movement.*

Returning to the actual march, it was made in single column in the defiles, elsewhere in double, and by company front even when the ground permitted. We may then say that, in the mean, the movement was executed in double formation, and that, for a single column, there would have been a delay of only about 24 hours.

After having pointed out the errors committed, it will be particularly interesting to enter into an inquiry as to how the operation should have been conducted.

Upon leaving Metz, the army had four roads at its disposal by which to reach the plateaus upon the left bank of the Moselle; namely:—

1st. From Metz to Ste.-Marie-aux-Chênes, by way of Woippy, Saulny, and St.-Privat-la-Montagne; distance, 10 miles.

2d. From Metz to Habonville, *viâ* Lorry and Amanvillers; distance, 10 miles.

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* General Lewal. *Tactics for the March.*

3d. From Metz to Verneville, by Plappeville, Lessy, Châtel-Saint-Germain; distance, 9⅓ miles.

4th. From Metz to Gravelotte, by way of Moulins and Point-du-Jour; distance, 8⅓ miles.

According to General Lewal, by utilizing these four roads, the movement could have been made in about one-fourth of the time, that is to say, in from 27 to 28 hours in simple, or 19 to 20 hours in double, formation. This has reference to the whole movement from the places occupied upon the right bank to the points of destination.

Again, if for an instant we suppose the operation conducted in accordance with the ordinary conditions prescribed for the march of the Prussian armies in our day, we have the following dispositions:—

The order of movement would have been given on the evening of the 13th for the next morning; and an army corps, supported if necessary by part of the Reserve Artillery, would have been charged with covering the retreat, or with making a demonstration in front of the columns of the II. Army in the act of defiling by the left flank within sight of the forts of Metz.

After the adoption of this measure, the four corps, the Lapasset Brigade, and the Cavalry Reserves, would have been put in march. For this there were available three ponton and two permanent bridges, or even three of the latter if the railroad bridge be included; but this bridge, situated to the south of Metz, was too much exposed to be easily utilized. There were then five bridges and four roads.

It should have been prescribed to the cavalry divisions to set out on the evening of the 13th and push to the front to a distance of a day's march.

Then on the morning of the 14th, two corps designed to form a first echelon, should have crossed the Moselle in their turn, severally forming two columns, one of a

single division, the other of two divisions, each column making use of at least one bridge and one road.

These corps would thus have been able to cover from 13 to 14 miles during the first march.

On the afternoon of the 14th or the morning of the 15th, according to circumstances, the other two corps would have been able to march in the same way as a second echelon, and would have taken position a few kilometres behind the first.

Finally, as soon as the retreat was decided upon, the commander-in-chief would no doubt have prescribed that combat should in no case be accepted upon the right bank; and once the principal masses were in motion, the force left in observation would have followed the army and covered its march.

At all events, there was a certainty of having the army concentrated upon the plateaus on the left bank, on the evening of the 15th.

It would then have been in the best possible situation to engage the III. and X. German Corps with advantage during the 16th.

The motives influencing Marshal Bazaine to execute the retreat in a single column are unknown.

The inconveniences likely to result from the orders given were made clear to him. It was then with a full knowledge of the case that he adhered to his designs.

We are warranted in believing that the difficult conditions under which he had assumed command made their influence felt upon his decisions.

He had accepted his high office after having previously declined it.

Then, in the face of his rejection for chief-of-staff of a general whose ideas were not in harmony with his own, he was forced to accept him.

Lastly, he thought to take the offensive on the 13th August; but the Emperor, dismayed over the situation,

was solicitous for a retreat, and on the 12th wrote to him as follows:—

"The more I reflect upon the position occupied by the army, the more critical I find it; for if a part should be forced, and our troops obliged to retire in disorder, the forts would not be able to prevent the most terrible confusion. See what can be done, and if we are not attacked to-morrow, let us come to a determination."

On 13th August he wrote again:—

"There is not a moment to be lost in making the movement decided upon."

The Marshal at 9:30 P. M. replied:—

"The enemy appearing to draw near us and to watch our movements, insomuch that the passage to the left bank would involve a combat unfavorable for us, it is preferable either to await him within our lines, or move to the front and take a general offensive against him.

"I shall at once endeavor to gain information of the situation; I shall then order the execution of the movements that seem proper in the case, and make a report of them to Your Majesty."

The Emperor still insisted, and at 11 P. M. sent to the Marshal a dispatch received from the Empress announcing the passage of the Moselle by the German armies, to the north and south of Metz.

It was then that the Marshal abandoned his project, and decided to order a retreat under the conditions already described.

Had he secretly resolved to delay the movement in the hope of seeing the Emperor depart, and of thus freeing himself of a tutelage which paralyzed his exercise of command?

The future will perhaps reveal.

Conclusions.—From all that has been said concerning marches, we may in the first place deduce the general

principle that in this species of operations more than in any other, one should respect the facts of experience, and rigorously conform thereto.

Going further, we are likewise able to draw the following conclusions:—

1st. *All causes of delay should be avoided.* The chiefs of column should require their troops to exert themselves to the utmost in moving to the assigned march objectives.

2d. *Deep columns are a danger.* An army corps should then march in division columns whenever practicable.

Armies should secure at least one road to each corps.

3d. *It is indispensable to train the grand units in time of peace to surmount the serious practical difficulties to be met with in marches.*

4th. Finally, in regulating the movements of the troops, it will always be useful to bear in mind that the theoretical data relative to the duration of marches and the lengthening of the column are not invariable.

The poor state of the roads, an unusual temperature, unfavorable material conditions, often the lack of proper ardor, sometimes even the impressions produced upon the minds of the soldiers, exercise upon marches influences whose scope can not be measured, and which may double or in some cases treble the normal time required for their execution.

SECOND CHAPTER.

MANŒUVRE-MARCHES.

§ 1.—GENERAL PRINCIPLES.

In preceding studies, we have seen how modern armies, after forcibly crossing the hostile frontier, execute the strategic marches conducting them to the vicinity of the adversary's principal forces. At this point, strategy yields precedence to tactics. The army's strategic aim remains, as in the past, the mainspring of its movements; but it is tactics that presides over their determination and execution.

Daily minor engagements, and greater resistance at the front, make it evident that the hostile masses are now within striking distance. A decisive engagement is imminent; the general dispositions are to be modified, and the battle becomes the immediate objective.

The movements executed under these circumstances have been designated *manœuvre-marches.* Their aim is ordinarily *to reach the enemy in force upon a decisive point.*

They are divided into front and flank marches. The latter class includes changes of front by wheeling movements.

Those of the former cast have already been discussed at length; and the numerous examples drawn from the campaigns of the early part of the century and from contemporaneous wars, have set in relief the rules governing this species of manœuvre-marches.

The movement of the II. German army to the Sarre on 5th August, 1870, has exhibited to us the situation

created by a manœuvre-march to the front at the moment of approaching the enemy. The mounted scouts are in touch with the latter; the bulk of the cavalry divisions is but a few kilometres behind. A short half-march in rear of these mounted forces come the strong advanced-guards of the corps. They are followed by the main columns, which should not at this stage be at a greater remove than 4 or 5 kilometres [about 3 miles].

Finally, still further behind march the forces of the second line, at distances not exceeding 8 or 10 kilometres from the corps immediately in their front.

These are the proper dispositions for manœuvre-marches. They are adopted solely in view of an encounter with the enemy, and correspond to the most critical moment in an army's career. They pertain to those grand-tactical questions which arise before decisive engagements.

We may now turn to flank marches, and changes of front by a wheeling movement.

§ 2. FLANK MARCHES.

An army whose columns follow a direction parallel to the front of the hostile army is said to execute a flank march. These movements sometimes lead to the turning of one of the enemy's wings; but they are difficult and dangerous operations.

The Army of Châlons in 1870 unwittingly attempted a flank march without observing the precautions prescribed for such a movement. Its destruction was the consequence of this neglect.

During such marches the forces liable to be struck by the enemy should be protected on the menaced side. Thus it has been recognized, in all epochs, that they should be covered in this direction either by accidents of the ground or detachments of troops.

We have already seen from the historical instances

cited, that in such a case army commanders utilize the protection which rivers and mountain chains afford, by holding, until the completion of the operation, the points of passage giving access to the flanks of their columns or to their communications.

But it is especially the tactical dispositions designed to assure the execution of these movements that claim attention.

Several examples will serve to put the subject in relief.

I.—Radetsky's Flank March in 1848.

In this year, the Piedmontese army commanded by King Charles Albert, stood upon the heights of Somma-Campagna eastward of Peschiera, engrossed in covering the siege of this city, and in observing Verona, where the bulk of the Austrian army was stationed under orders of Field-Marshal Radetsky. (*See Plate II.*)

Meditating the deliverance of Peschiera, the Austrian general formed the design of executing a flank march in the direction of Mantua, debouching then by the right bank of the Mincio upon the communications of the enemy, and attacking him unexpectedly. It was a movement similar to that adopted by him the following year, before the battle of Novara.

Two roads were open to him, one by way of Isola-della-Scala, 20½ miles long; the other *viâ* Legnago and the left bank of the Adige, about 56 miles in extent. Speed in execution and secrecy were indispensable conditions of success.*

To enlist the first element, rapidity, Radetsky was forced to choose the shorter route, although it was at the same time the more dangerous, by reason of the propinquity of the enemy's masses.

Keeping his project absolutely secret, he first of all

* General Pierron, *Méthodes de Guerre.*

ordered Colonel Zobel, who was at Rivoli, to make offensive demonstrations in the direction of Peschiera.

Then, on 27th May, he posted a brigade of the reserve corps beyond Verona, opposite the heights of Sona and Somma-Campagna, with a view to concealing his intended movement. This brigade was to be relieved later by the garrison of Verona, and follow the main forces as a rear-guard.

At 9 P. M., of this day, Radetsky assembled his army in three columns to the south of Verona. At 10 P. M., the movement began, the baggage being left behind.

The right column, constituted by the 1st Corps with a strength of 12,000 men, marched by the road Vigasio, Castel-Belforte.

The central column, made up of the 2d and 3d Corps and counting an effective of 25,000 men, followed the road Isola-della-Scala, Sorga, Castellaro.

The left column, formed by the cavalry of the 3d Corps, was to take the road Villa-Fontana, Nogard, Castellaro, and upon reaching the last place was to follow the central column.

For the purpose of covering the march, detachments of flankers were to be furnished by the right column, and thrown out upon the Isola-Alta and Bagnolo roads. Each brigade to this end detached a company of infantry and a platoon of cavalry.

On the morning following this night march, the three columns had reached the line of the Molinella canal, that of the right at 7 o'clock, of the centre at 9, of the left at 10. After a general halt here, the march was resumed in two columns, one setting out at 11 A. M., the other at 3 P. M., the design being to reach Mantua during the evening.

The Reserve Brigade having left Verona at an early hour on the morning of this day, reached the Molinella at the moment the other forces were leaving. It fol-

lowed the movement to Mantua, where the army was assembled the same night.

On the next day, the 29th, the troops debouched from this place, and, descending the valley of the Mincio, reached Goito before the Piedmontese had gathered there in force.

The latter were completely defeated.

The march had then been entirely successful; but Peschiera having succumbed the evening before, the aim of the expedition could not be attained.*

Comments.—This flank march had been facilitated: 1st, by an offensive demonstration made in a direction contrary to that actually to be pursued; 2nd, by the employment of detachments of flankers upon the menaced side; 3d, by night movements.

Usually, small flanking bodies will be insufficient. It is preferable to make use of a special detachment, strong enough to resist the enemy's attacks. This will be charged with assuring the safety of the columns, in the way shown by the order of General Von Moltke, issued in pursuance of the project of a flank march which he for a moment entertained on the eve of Königgrätz.

II.—Plan of Flank March in Case of the Prussian Armies in 1866.

On 2nd July, 1866, the I. Prussian Army and the Army of the Elbe occupied the line Horitz-Smidar. Their advanced-guards were scarcely a German mile [between 4 and 5 English miles] distant from the hostile outposts, and yet they were ignorant of the presence of the Austrian forces.

It was the belief of the Prussian general-staff that the enemy occupied the line of the Elbe between Josephstadt and Königgrätz. It seemed necessary then, either

* General Pierron.

to assail him in this position or to manoeuvre him out of it.

With the first idea in view, General Von Moltke conceived the design of directing the II. Army, then around Königinhof, by the left bank of the Elbe, to bear down upon the right flank of the enemy's position, while the I. Army and the Army of the Elbe attacked in front. This was an angular formation, and held out a prospect of favorable results. But this project was not adhered to. The chief of general-staff preferred to manoeuvre with a view to dislodge the adversary. There appeared but one means to this end,—to adopt a march direction which would permit the communications of the enemy to be seized. He consequently chose for objective the town of Pardubitz, on the road from Königgrätz to Vienna, whence the supposed left flank of the enemy could be threatened. (*See Plate III.*)

This was a movement similar to the one afterwards made by him against the right of our Metz army.

But to reach Pardubitz, it was essential that two of his armies should make an extended flank march. In the execution of his plan, the necessity arose of taking measures to prevent the enemy's issuing from his positions and throwing himself upon the left flank of the moving columns.

"In the first case," says the Prussian staff account, "the II. Army must remain on the left bank of the Elbe; in the second, it must be moved to the right side."

This was the prelude to the flank march. It was requisite, in the next place, to insure its protection. Evidently the situation was difficult; and in view of a resolution so important, it was indispensably necessary to first of all become well assured of the exact position of the enemy's forces.

These different considerations determined Von Moltke

to issue the following order on 2d July, 1866, through the King:—

"GITSCHIN, July 2, 1866.

"General Herwarth will be directed upon Chlumetz to watch the country toward Prague, and to insure possession of the bridges at Pardubitz. The other corps of the I. Army will move to the line Neu-Bidsow, Horitz; the left wing to send a detachment upon Sadowa to reconnoitre the line of the Elbe between Königgrätz and Josephstadt.

"Should forces of the enemy be encountered in front of this line, and they are not too considerable, they should be attacked at once, the precaution being taken of assuring superiority over them if possible.

"The I. Corps will advance, by way of Miletin, upon Bürglitz and Cerekwitz; it is charged with observing Josephstadt, and with covering the II. Army during the latter's march by the right flank, if this movement should be ordered.

"The other corps of the II. Army will remain during July 3 on the left bank of the Elbe, and will send reconnoitring parties in the direction of Aupa and Métau.

"Reports on the nature of the country and the situation of the enemy are to be immediately dispatched to general headquarters. Should it be concluded from these reports that a concentric attack of both armies upon the main force of the enemy, which is supposed to be between Königgrätz and Josephstadt, would be attended by too many difficulties, or that the Austrian army has already evacuated this position, the general movement toward Pardubitz will be continued.

"The II. Army will at once take measures to assure the supply of the troops during this march.

"The commanders of both armies will send officers every evening to his Majesty's headquarters for orders.

[Signed] "VON MOLTKE.

"*Headquarters, Gitschin, July 2, 1866.*"

Comments.—The combination adopted by the Prussian generalissimo to assure the success of his flank march was a precautionary measure which deserves to be dwelt upon.

It consisted:—

1st. In throwing out strong detachments toward the enemy to push back his outposts to the position occupied by the main forces, in case such should be found between this locality and the armies in march.

This disposition arose from the special circumstance that a natural obstacle, the Elbe, lay between this supposed position and the Prussian forces.

It was therefore logical, in order to protect the movement, to drive back the hostile detachments beyond this obstacle, and to thus clear the ground.

This was so much the more useful as it would lead to a prompt discovery of the location of the enemy, without prejudicing the dispositions made for attack.

2d. In pushing forward an entire corps between the columns in march and the opposing army. This was the I. Corps of the II. Army. It was already cantoned upon the right bank of the Elbe.

If, during this manœuvre, the Austrians should have attempted to fall upon the left flank of the Prussian columns, they would themselves have been assailed upon their right by the I. Corps, in position at Cerekwitz, while the I. Army suspending its march in order to form front, would have attacked them in its turn.

The angular formation remained in all cases the basis of the Prussian combinations; and we shall see that this disposition was again put in force on the 13th and 14th August, 1870, upon the right bank of the Moselle, by the I. and II. Prussian armies.

But information received during the evening of July 2d having disclosed the fact that the Austrian army was scarcely 3¾ miles distant, the idea of the flank march

was abandoned, and orders for the battle of the next day were dispatched forthwith.

In 1870, however, we saw the Prussian armies bringing an operation of this kind to a successful finish.

III.—March of the II. Prussian Army to the Moselle in 1870.

After having forced the Sarre frontier, General Von Moltke resolved to move the II. Army to the Moselle above Metz, in order to turn our right, while we were yet upon the right bank of this river.

The combination adopted has been described in these terms by the Prussian general-staff:—

"It was supposed that the Emperor Napoleon was upon the Moselle with an army composed of five corps. If it was determined to approach him in front and at the same time outflank his right by superior forces, our own right wing, that is to say, the I. Army, must be held in rear. Its offensive movement must indeed be so much the more delayed, as, in consequence of circumstances already alluded to, the left wing of the II. Army was obliged to make a wide détour to the south, while the centre still continued to close up its masses."

It was a question, then, of executing a flank march in the vicinity of the enemy's forces.

After waiting from 7th to 9th August, in order to get light upon our positions, Von Moltke, on the next day, began the movement towards the Moselle.

Stated in brief, he counted upon protecting it by "a judicious employment of the cavalry, and a system of advanced-guards thrown far to the front, for the purpose of giving security to the marches, and of affording the armies opportunity to effect a seasonable concentration should this become necessary."*

At the outset this army had a march front of between

* History of the Franco-German War.

18 and 19 miles. The cavalry brigades were pushed to a distance of from 9⅓ to 13⅔ miles beyond the front, and their patrols a half march still farther in advance.

But on the evening of the 11th, intelligence received respecting our forces obliged the Prussian staff to temporarily renounce its project. This information was to the effect that we had taken up position on the French Nied, as if determined to stand for battle here.

The idea of the Prussians was now to assemble for action, and orders were issued for the 12th, directing a concentration upon the III. Corps, which formed the right of the first echelon.

But this state of affairs was of short duration. The banks of the Nied were abandoned by us on the 13th, and the Prussian armies were able to resume their march, which was not in reality to take on the character of a flank march until these forces arrived abreast of Metz.

Once in this region, the Prussian staff was obliged to take measures for the security of its columns.

To this end, it examined the situation of the opposing army, and endeavored to discover what combinations the latter might adopt.

The state of affairs was as follows:—

Our forces were gathered on the right bank of the Moselle, within protective reach of the guns of Metz. (*See Plate IV.*)

The I. Prussian Army, marching in our traces, reached the Nied and deployed, while the II. Army moved toward the Moselle.

"This deployment," says the Prussian staff, "completely secured the II. Army against the enterprises of the French on the right bank; for the I. Army could immediately take the offensive should the enemy decide to defile before its front, in a movement southward.

Thus, in case our forces had wished to assail the

columns in march towards the Moselle, they would have been attacked upon their left by the I. Army, and in front, a short time afterwards, by the corps of the II. Army wheeled into line to the right for this purpose."

We should thus have run the risk of being obliged to contend against the angular disposition, apparently the favorite combination of General Von Moltke.

"If, on the contrary, the French, passing through Metz, ascended the left bank to engage the II. Army, the latter could in case of necessity fall back upon the army of the Crown Prince, while the I. Army, leaving observation troops before Metz, would be in position to cross the Moselle above and in the vicinity of this place, and move upon the adversary's rear."

As a final contingency, our forces might attack the I. Army. In this case the Prussian staff intended that the II. Army should form front, and assail us in flank. This was again the angular formation. Orders were given in this sense on the evening of the 12th for the next day. Their execution led the different corps into the following positions:—

I. Army.

I. Corps at Courcelles-Chaussy.

VII. Corps at Pange.

VIII. Corps at Varize, in general reserve.

The 3d Cavalry Division, in reconnaissance toward the north and west.

The advanced-guards occupied the line Ste.-Barbe, Retonfay, Ogy, Frontigny.

This army had then two corps in first line, upon a front of scarcely 5 miles, and another in reserve $3\frac{1}{16}$ miles in rear.

The distances of the advanced-guards varied from $1\frac{3}{4}$ to 5 miles.

This was a true concentration for battle.

II. Army.

The 1st Cavalry Division at Pontoy, upon the right flank; the 6th Cavalry Division at Verny.

The mission of both was to occupy the ground between the I. Army and the Moselle, and to "conceal the march of the II. Army from the side of Metz."

They formed a covering screen for the flank march, the outposts extending from Frontigny to the Moselle, by way of Pouilly and Corny.

In rear of these divisions were two corps, the III. and IX., at Béchy and Herny, with orders to support the I. Army in case of attack.

The II. Army, in addition, held its X. Corps, on the 13th, at Noménу and Pont-à-Mousson, consequently upon the Moselle; its IV. at Chateau-Salins, the Guard at Oron; and its XII. Corps at Chemery.

The front did not exceed 13 miles, and the cavalry was for the most part upon the threatened flank.

Such were these dispositions. They give rise to various reflections.

Comments.—It is proper to examine in what measure the III. and IX. Corps were in condition, on the 13th August, to really concur in an action against the French army.

A study of the distances gives us:—

March of the III. Corps, 13th August, from Faulquemont to Béchy . . . . . 11¼ miles.

Or allowing for a normal lengthening of about one fourth . . . . . 13⅞ "

Distance from Béchy to Pange (left flank of the I. Army) . . . . . 7½ "

Or allowing for extension of column . . . 9⅛ "

March of the IX. Corps from St.-Avold and Longeville to Many and Herny . . . . . 11⅛ "

Distance from Herny to Pange . . . . . 9⅛ "

If the Army of Metz had attacked the I. Army at about 3 P. M., on the 13th, it would have found the Prussian troops fatigued by travel, and still in march formation. The time necessary to deploy, and to begin the combat and support it, would have been two hours, and this before it would have been possible to get word to the neighboring corps.

At 4:30 or 5 P. M., the III. and IX. Corps would have been found upon the point of finishing the day's march. Their heads of columns would have been obliged to make additional movements of 11½ and 13½ miles respectively, in order to reach the left of the presumed battle-field.

They would thus have been required to travel before night a distance equal to an entire day's march.

Could they have arrived in time? And was not this day for the French army one of those occasions which experienced warriors have never failed to seize? We are warranted in believing so, especially upon calling to mind that it had then an effective of 176,000 men, while the I. Prussian Army would not have been able to put in line more than 90,000.

Certain it is that the German generalissimo, seeing our army did not stir on the 13th, gave orders to the II. Army to continue its flank march on the next day.

The III. and IX. Corps went into cantonment on this date at a distance of 5 miles from the positions of the I. Army.

Notwithstanding their certain support, a battle between our forces and the five hostile corps that could be brought into action to the north of Metz, might still have been favorable to our arms.

Conclusions.—In order to execute a flank march in proximity to the enemy, it would be advantageous for a group of armies to adopt the following dispositions:—

1st. To place one army in position before the enemy's masses, upon a front perpendicular to the line of the flank march;

2nd. To complete the covering of the movement by utilizing masses of cavalry as a screen, and by holding one or two army corps in such a position as shall permit them to concur in a general action, and if necessary, strike the enemy on the flank by forming an offensive crotchet.

In the case just considered, it was our hesitation that came most in aid of the movements of the II. Prussian Army. Thus, on 14th August, seeing that we were commencing to retreat toward the left bank of the Moselle, the I. Army took the offensive in order to delay the operation. It was then, indeed, that a simple demonstration would perhaps have been sufficient, with the support of the forts of Metz, to check the I. and VII. Prussian Corps, and thereby afford us opportunity, had we wished it, to accelerate our march toward the plateaus on the left bank.

Flank marches do not differ in reality from those executed to the front, except so far as the position of the enemy is concerned.

As a consequence of the variance in this particular, the principal covering force, instead of being in front, is held out on the flank; and we may conclude with General Lewal that this circumstance is not of a nature to call for a modification of the ordinary order of march. The only difference is that the service of protection is strengthened upon the menaced flank, and the reconnaissance service developed principally upon this side.

It may be said also, that in case of trained and seasoned troops, the dangers of a flank march would be very much diminished. It is no more difficult to effect a deployment to a flank than to the front. It will often,

indeed, be easier. The important consideration is to have time for its execution; and this will depend upon the distance to which the troops charged with covering the flank have been pushed.

We frequently see, in the wars of Prussia, of what importance is the position of the detachment covering a flank march, and demonstrations of the fact that the army on the march should endeavor to be in constant readiness to form front to this flank with sufficient forces to engage with advantage.

IV.—Wheeling Manoeuvres.

The campaigns of Napoleon I. offer us many examples of operations of this cast.

It was by such a movement that he attempted, in Poland, in December, 1806, to outflank the Russian forces on the right, and separate them from the Prussian army, while menacing their communications.

He then executed a wheeling manoeuvre, pivoting on the right wing.

The general method employed consisted in supporting the pivot flank upon a fortified town, Praga,* which he took the precaution to temporarily convert into an entrenched camp, and in covering his outward flank by an army corps.

In 1809 a like manoeuvre, a magnificent movement which has so often been described, permitted him to debouch from the island of Lobau and deploy his army in a position opposite the heights of Wagram.

He again supported a wing, in this case the left, upon a veritable stronghold, the island just mentioned, which had been covered with field-batteries and other works, and confided to the Davout Corps the duty of protecting

* A suburb of Warsaw.—Tr.

the marching wing in its outflanking attack upon the hostile left.

The Prussians in 1870 executed similar manœuvre-marches, in which they seemed inspired by the principles of Napoleon.

But confident in their numerical superiority, they did not hesitate to supply the place of field works by the assembly of one or two army corps at the *pivot de manœuvres.*

"If the French army," says Major Von der Goltz, "had determined on 11th August, 1870, to remain behind the French Nied, the intention of Prince Frederick Charles, commander-in-chief of the II. Prussian Army, was to execute a wheel to the right, from Faulquemont to Verny-sur-Seille.

"The III. Corps placed in the right wing at Faulquemont would have served as a pivot, and also as a means of opposing the French Army in front; while the remainder of the II. Army would have crossed to the left bank of the Nied, further up the stream, in order to act against the enemy's right flank.

"Moreover, for the purpose of cutting the French communications with the valley of the Moselle, the left wing of the II. Prussian Army was, while executing its wheel, to dispatch a detachment for the occupation of Pont-à-Mousson.

"The danger attending such an operation lay in the fact that it invited the French army to fall with the bulk of its forces upon the III. Prussian Corps remaining stationary at the pivot; but the latter was ordered to defensively organize its position. Further, the IX. Corps, in second line, was to move out from Forbach and the X. from Chemery, to its support."

This project was not put into execution, but the German forces were some days later, just before engaging at Gravelotte, to execute manœuvre-marches of a similar character.

DEPLOYMENT OF THE GERMAN ARMY, AUGUST 18, 1870.

Preparation of the Movement.—On the evening of 16th August, after the battle of Rezonville, the commander-in-chief of the II. Army, then at Gorze, expected to be assailed on the morning of the 17th by the masses encountered the evening before.

"The exhaustion of the troops engaged in the action," says the official Prussian account, "imperatively demanded that efforts be immediately made to assemble upon the battle-field, as quickly as possible, sufficient fresh forces to meet the anticipated attack."

This estimate, which in a certain measure may be regarded as an avowal of failure, shows us what course was open to our forces. It had for result the movement toward the scene of action of all troops, without exception, that could possibly be got together in 24 hours.

At this moment the German corps which had crossed the Moselle, were marching straight toward the west to gain the Meuse. The others were approaching the Moselle by the roads converging from the Sarre upon Pont-à-Mousson.

In consequence of these dispositions, the IX. Corps, already arrived in part, was to be assembled on the morning of the 17th northward of Gorze. (*See Plate V.*)

The XII., arriving on the 16th at Pont-à-Mousson and Régniérville-en-Haye, was to move by way of Thiaucourt to the vicinity of Mars-la-Tour. The Guard, which on the 16th had reached Bernecourt and Beaumont, between the Moselle and the Meuse, was to form to the left of the Saxons.

These two corps were respectively 18⅔ and 23½ miles from the battle-field.

The VII. and VIII. Corps of the I. Army were to take part in this movement, the one pushing from Silegny to Gravelotte, the other from Lorry to Rezonville.

The II. Corps at Buchy, that is to say, two marches

from Mars-la-Tour, had orders to move rapidly upon Pont-à-Mousson.

As to the IV. Corps, too far distant upon the left, it was simply to continue its movement toward the Meuse.

The commander-in-chief drew thus to the theatre of action seven army corps and three divisions of cavalry. He omitted from his concentration the I. Corps, which was to watch the right bank of the Moselle, and, as has just been intimated, the IV., the direction of whose march placed it out of range of the movement.

The operations ordered were duly executed, and by noon of the 17th, Prince Frederick Charles had in hand an army of six corps.

At this time there was a feeling of uncertainty at the general headquarters respecting the situation of our army; in fact, it was not known what had become of it.

But, during the 17th, seeing that we did not attack, the King of Prussia resolved to move forward on the next day with his united forces.

In consequence, he dispatched to the I. and II. Armies, at about 2 P. M. of the 17th, the following order:—

"At 5 A. M. to-morrow, the 18th, the II. Army will advance in echelon from the left, between the Yron and Gorze Creek (general direction between Ville-sur-Yron and Rezonville). The VIII. Corps will accompany this movement, on the right flank of the II. Army.

"The VII. Corps has, as a first duty, to cover the march of the II. Army against all attempts coming from the direction of Metz," etc.

The idea was then to first of all execute on the next day a front manœuvre-march in echelon, the left wing in advance, gaining ground toward the north, the right wing forming point of support, and remaining almost stationary.

This manœuvre was to answer to a double hypothesis.

If in marching toward the north the German army

found our columns in retreat westward, it would force them to halt, and to then stand for battle in a strategically unfavorable position—that is, with the Belgian frontier at their backs, at a distance of scarcely one or two marches.

If, on the contrary, it was seen that our masses had fallen back upon Metz, this movement in echelon from the left, prepared, said General Von Moltke, the change of front necessary to close upon this place. It was, moreover, the prelude to the tactical envelopment of our right flank.

In order the better to follow this manœuvre, and to estimate its character and scope, it is essential to know how the German forces were distributed on the evening of the 17th.

The VII. Corps held Ars-sur-Moselle and the wood of Vaux.

The VIII. was at Gorze, at the disposal of the commander-in-chief of the II. Army.

The III. at Vionville and Pouxières.

The X. at Tronville.

The XII. at Mars-la-Tour and Puxieux.

The Guard at Hannonville.

The II. at Pont-à-Mousson.

The 6th Cavalry Division at Flavigny.

The 5th at Tronville.

The Cavalry Division of the Guard at Hannonville and Tronville.

The Saxon Cavalry Division of the XII. Corps had been pushed to the front, and stood at Parfondrupt, on the road to Étain.

This army, then, was developed upon a front of between 11 and 12 miles, faced to the north, with two corps held near Metz upon the right flank.

This was almost a combat disposition.

According to the instructions of the generalissimo,

the VII. Corps was to be under arms at 5 A. M. on the 18th, and at all hazards to hold fast to its position, which formed "the pivot of the entire movement of the army."

It covered this movement, then, against enterprises directed from Metz. This was a mission similar to the one Von Moltke, in 1866, wished to confide to the I. Corps of the II. Army during the march of the I. Army upon Pardubitz.

But in the case we are considering, Steinmetz, commander of the I. Army, was concerned over the isolated position of the VII. Corps.

He brought to the attention of Von Moltke the fact that it lacked support, and that its situation seemed to him hazardous, since the VIII. Corps, at Gorze, was under command of the chief of the II. Army.

The General responded, clearly setting forth the fundamental idea of the projected manoeuvre-march.

"At the outset," said he, "the attitude of the VII. Corps should be defensive. Connection with the VIII. can be made only to the front. If it should be found that the enemy's force is falling back upon Metz, a wheel to the right will take place in our army.

"In case of need, the I. Army will be supported by the second line of the II. Army."

The movement was then well defined. There was to be, first of all, a march to the front; then, under certain circumstances, a wheel to the right.

Nevertheless, General Steinmetz ordered a portion of the I. Corps to support the VII., because, said he, the latter was called to form "the basis of the movement in echelon to be executed from the left."

Everything was then ready for this vast manoeuvre. Nothing remained but to attend to its execution.

Front Manoeuvre-March on the Morning of August 18.—The VII. Corps remained in position during the morning of

this day. It was under arms, and its outposts engaged in skirmishes with ours.

The VIII. Corps moved upon Rezonville, pushing an advanced-guard to Villers-aux-Bois, 1¼ miles in advance.

In the II. Army, Prince Frederick Charles assembled his generals at 5:30 A. M., and gave them verbal instructions for the execution of the march, which may be epitomized thus:—

"The II. Army will to-day continue its forward movement.

"Its constant aim will be to cut the adversary from Verdun and Châlons, and attack him wherever he may be found.

"To this end, the XII. Corps will form the extreme left, having on its right rear the Guard, which will itself be followed in the same way by the IX. Corps.

"The XII. Corps will be directed upon Jarny; the Guard upon Doncourt. The IX. will advance between Vionville and Rezonville, leaving Saint-Marcel close upon the left.

"The III. Corps will follow the IX., holding itself between it and the Guard. The 6th Cavalry Division will receive orders from the general commanding the III. Corps.

"The corps artillery of the latter will remain at the disposal of the commander of the II. Army, as a general artillery reserve.

"The X. Corps, with the 5th Cavalry Division, will follow the XII., in such wise as to maintain its line of march between that corps and the Guard.

"The whereabouts of the enemy is not yet known."

* * * "For the moment, it is a question of only a short march of 5 miles.

"It should be effected, not in long attenuated columns, but *by divisions closed in mass, the corps artillery between the two divisions of each army corps.*"

In case of a wheel to the right, the VIII. Corps was to move toward Metz, upon the right-rear of the IX.; the VII. still farther to the right.

It was calculated that the II. Corps would arrive at about 2 P. M.

The first objective of this manoeuvre was the road to Étain, which the Saxon cavalry, 6½ miles to the front, had been holding under observation since the evening before.

This first part of the march was terminated between 9 and 10 o'clock, A. M. The different corps, brought to a halt in the assigned positions, at about 11 A. M. occupied the space, 7½ miles in extent, comprised between Jarny and the wood of Vaux. They were echeloned in two lines.

At this moment, trustworthy information received concerning the enemy, guided the German generalissimo to a definite decision. He now learned that our army had fallen back toward Metz, and stood in a defensive position upon the plateaus of La Folie. He was simply ignorant of the point to which our right extended, and during the first hours of the battle supposed that it did not reach beyond Amanvillers. It was of extreme importance for him to form a correct hypothesis on this subject; for the extension given the movement of his marching wing had no other aim than to outflank our right. It was necessary, then, to know with precision our point of support on this side.

Change of Front to the Right.—Thenceforth it was evident that the army was to execute a change of front to the right; and at 11 o'clock, the generalissimo indicated new points of direction to the corps of the II. Army as follow:—

"* * * * The XII. Corps and the Guard are to be moved toward Batilly in such wise as to overtake

the adversary at Ste-Marie-aux-Chênes, should he retire upon Briey; or to attack him from Amanvillers in the event of his remaining upon the heights.

"The attacks will be made simultaneously: in case of the I. Army, from Gravelotte and the wood of Vaux; of the IX. Corps, against Verneville and the wood of Genivaux; of the left wing of the II. Army, from the north."

In consequence of these instructions, the commander of the II. Army prescribed:—

To the IX. Corps, to march upon Verneville and La Folie.

To the Guard, to move upon Verneville in support of the IX. Corps. Later, when the actual localities occupied by us were discovered, the Guard was directed toward Amanvillers.

To the III. Corps, to move to Caulre Farm, then to Verneville.

To the XII. Corps, to remain provisionally at Jarny. After our position was determined, Ste.-Marie-aux-Chênes was designated as the march objective of this corps; and it was to cover the army to the north and west with its division of Saxon cavalry.

The corps of the second line were directed:—

The X., upon St.-Ail;

The II., upon Buxières, and thence upon Rezonville, to serve as a general reserve.

These dispositions were in process of execution, when, near noon, the battle of St.-Privat began upon the front of the IX. Corps, then arriving within range of our outposts.

Comments.—The rules to be followed by an army in making a wheeling movement are clearly indicated by this example, and may be stated as follow:—

1st. An army having to execute a wheel in the face

of the enemy without being able to pinion its pivot to fortified works, should strengthen this point by one or two corps.

2d. These corps are drawn from the second line if the movement is continued to the front.

3d. The manœuvre is executed in echelon; the second-line corps in rear of the intervals in the foremost line; the marching wing covered by a corps and by the cavalry.

It is proper to notice in the example selected, several tactical dispositions which, without either undue expansion or loss of time, seemed to aim at obtaining an immediate deployment in the event of an encounter with the enemy.

These are:—

Formations by divisions closed in mass, and the distribution of the corps of the second line opposite the intervals in the first.

Finally, we see exemplified in this movement, more clearly than in the campaign of 1866, the tendency of the Prussian generals to push artillery masses toward the leading groups of the column, for the purpose of being able, in the beginning of an action, to prepare for the attacks of the infantry by a powerful battery fire.

This tendency is shown by the place given the corps artillery, that is, behind the first infantry division.

The following dispositions were thus adopted.

Order of march of the Guard, in its movement from Hannonville to Doncourt:—

Advanced-guard.
- 1 regiment cavalry,
- 1 regiment infantry,
- 1 light battery,
- 1 rifle battalion.

Main body of 1st Infantry Division.

Corps Artillery.

2d Infantry Division.
1st Cavalry Brigade.

Order of march of the VIII. Corps:—

Advanced-guard.
2 squadrons,
1 regiment infantry,
1 rifle battalion,
1 company pioneers,
1 light battery,
1 regiment infantry.

Main body of 1st Infantry Division.
2 squadrons,
1 regiment,
3 batteries,
1 regiment.

Corps Artillery.
2d Infantry Division.

The grand-tactical principles just set forth were again illustrated in the movement of the Army of the Meuse and the III. Army from the Meuse upon Sedan, commencing 25th August.

Two corps, the III. and IX., were temporarily detached from the army investing Metz, in order to reinforce the pivot flank during the wheel to the right, about to be undertaken by the Prussian masses.

As to the marching wing, it was in this instance covered by four divisions of cavalry.

Lastly, an army corps protected the movement in the direction of Rheims.

The limits of this work opposing a further development of the considerations relative to manœuvre-marches, it is proper to bring this study to a close here.

We have now conducted the armies into the presence of the enemy. The opposing masses are in contact; they are about to enter upon the decisive act of the war, the *combat.*

THIRD CHAPTER.

COMBATS.

§ 1.—GENERAL CONSIDERATIONS.

The combat is the decisive act of war. Like the latter it has but one aim, the destruction of the enemy; but one means of action, the employment of the material forces.

These serve to overthrow moral force, and this end once attained, success becomes assured. From this point of view, the more or less skillful use of the material forces has a preponderating influence upon the final result.

As has already been said, it is the rules relative to such use, taken in their entirety, that constitute tactics.

It is the losses inflicted upon the enemy which sap his moral force and determine his retreat. When moral disintegration is complete, terror seizes the masses, and retreat is converted into a rout.

Experience shows that the moral power of an army may be gauged by the magnitude of the losses it is capable of bearing up under.

A practical study upon the subject of combats ought therefore to indicate, first of all, the elements constituting this moral force, and then the tactical measures by which it may be destroyed.

I.—Moral Force.

The moral force of troops depends upon the sentiment of duty animating them. The soldier who, subjected

to the most deadly fire, remains under the control of his leaders, always ready to move forward without ever thinking of recoiling, possesses a moral strength which enables him to brave all ordeals. In the combat, it is he who will use his means of destruction to the best advantage; and when such material means are in even balance between the combatants, it is he who will triumph.

In a hostile engagement, indeed, the moral forces of the two combatants come into competition. It is seen that in certain epochs, the more powerful moral force always gained the ascendant, no matter what the character of the material force opposed to it. To-day this is no longer the case; and superiority in means of destruction ought generally to lead to the annihilation of the most highly tempered moral force.

Nevertheless, "with equal power of destruction," says Colonel Ardant du Picq,* "that side will carry the day, which is able, by its resolution, to march forward; by its dispositions and movements, to hold over the adversary the menace of a fresh blow; in fine, to seize the moral ascendency."

What are the means of creating and developing the moral force of armies? They have already been indicated. It will be sufficient to review them in brief.

"Those things which especially characterize the soldier, the combatant capable of obedience and direction in action, are his sense of discipline, his respect for his leaders, his confidence in them and in his comrades, the fear of being reproached with having abandoned them in danger, the spirit of rivalry prompting him to go wherever others go, without exhibiting more trepidation than they;—in a word, *his esprit de corps.*"

* Killed at Metz, 15th August 1870, by a Prussian battery which was able without obstacle to cannonade, at short range, the left flank of our columns in march upon Gravelotte.

This sentiment is among the first to awaken in the breast of the soldier, when his moral force begins to assert itself. It depends especially on the influences brought to bear upon him during his term of service with the colors, the military training received, and, in a large degree, the organization of the army.

It is clear, indeed, that a body of troops in which each man is acquainted with his comrades and his leaders, will have, all other things being equal, a pronounced superiority over one not possessing this advantage. The French army is not, in this respect, among the most favored, since by reason of its system of recruitment and mobilization, an infantry company is able in the field to count only 75 soldiers of the regiment, against 175 who have received their military training elsewhere.

It is to be observed, however, that in the midst of the scattering of forces incident to modern combats, there is greater necessity than formerly for the high development of this feeling of confidence.

This is a question which interests our methods of recruiting, and which for a long time has constituted an argument in favor of the regional system, whatever may be its other inconveniences.

During the period spent by the man with the colors, incidents of various kinds contribute to increase or diminish his confidence in his leaders and his companions in arms. Included among those whose influence is the most potent are daily service, theoretic and practical instruction, and the annual manœuvres. Everywhere these incidents in the life of the soldier are zealously watched over. But is this sufficient in order to be certified that obligations respecting the training of the soldier are discharged in the most enlightened way? Routine often exercises an influence here which is submitted to without reflection. Is it to be always thought that once

drilled in the manual of arms and the execution of commands, the man will to-day stand in need of nothing further than a practice drill now and then? Marches, target-firing, field service, and combat manœuvres, are the matters which should almost exclusively constitute his course of instruction. The minutiæ of drill should be returned to only for the purpose of recalling them to those who may have become forgetful.

In this respect, the majority of the armies of the present day, deferring to the views of the still recent past, see in the instruction of troops two ends to be attained—soldierly attitude, and fitness for the combat. Attitude, appearance under arms, is the feature that pleases more than all others, that produces the first impression, that elicits the first expression of opinion. In consequence, how often has this part of the service been permitted to overbear the other requisites? It is, to be sure, an index of the state of discipline; but it is only an index, and an insignificant one in comparison with those furnished by marches and field manœuvres.

The modern combat demands that under all circumstances the premier place be accorded thorough instruction and practice in those exercises, including firing, which directly prepare the soldier for the requirements of actual field service.

Here the problem is simple. It has been stated by General Lewal in the following terms: "The fire being the chief and essential feature of the combat, it necessarily results that the most rational tactical disposition is that whereby the effects of the discharges against the enemy are increased, and which at the same time offers the means of avoiding the force of his return fire to as great an extent as possible."

It is essential, then, to adopt the combat tactics which gives to the particular arm used its greatest efficacy. In this connection, each country to-day endeavors to

copy the methods of the Germans, sometimes even without holding sufficient account of the aptitudes and character of the men by whom they are to be applied. However, the experience gained in our last campaigns and the lessons given us by our generals, ought to be sufficient for the French army.

Has not the plan of combat tactics for infantry been indicated by Marshal Bugeaud? His words on the subject, cited also by General Lewal, are as follow:—

"We have said that infantry should almost always act as skirmishers, supported by columns of little depth. The columns of four subdivisions (each subdivision being formed of a demi-platoon) are the best to employ; if one section is pushed forward as skirmishers, the other three are compact enough to charge or resist. The three or four divisions of a battalion, formed into distinct columns, will be able to arrange between themselves an echeloned system favorable equally for attack or defense." *

This is exactly the formation that the Prussians have applied for years, adds the General.

It is then the skirmish formation that permits the infantry to most fully develop the effect of its fire. And yet the method of firing by volley is also in repute. This no doubt arises from the fact that on the rifle range, well-drilled troops commanded by a skillful officer, will when practicing upon a properly contrived system of targets, display results very superior to those given by file-firing.

But upon the battle field, in the midst of the excitement of the strife, when the zone of danger has been reached, when the litter-bearers are coming and going, when the thunder of the cannon gains mastery over the feelings, when the rattle of the musketry bursts forth

* Marshal Bugeaud, *Maxims and Instructions.*

from all sides,—is it in such a situation advisable to count upon a fire which requires as much coolness on the part of the leader who directs it as of the soldier who executes it? It is sufficient to put the question, in order to affirm that volley firing will always be an exception in the field, and that there is the greatest necessity of being very sparing, in time of peace, of combat exercises calculated to create illusions.

"Upon the field of battle, death is in the air, invisible and blind, with frightful whizzing sounds, which involuntarily cause a lowering of the head. In presence of this fear, inexperienced soldiers form into groups, press close together, and seek a point of support, by an instinctive reasoning, the process of which they do not attempt to put into form.

"They imagine that the more numerous the force that runs a dangerous risk, the more favorable is the chance of individual escape. But they are not slow in perceiving that flesh attracts lead. Then, as they are necessarily capable of experiencing only a definite degree of fear, they escape, perforce, through the effects of their fire, or *they save themselves by advancing*, according to the graphic and profound expression of General Bourbaki.

"The soldier escapes from the control of the leader, say we; yes, he escapes! But is it not perceived that he escapes because, even to this day, enough attention has not been paid to the study of his character, his temperament, and his impressionable and nervous nature?

"Through the combat methods given him, he has always been confined in rigid limits, in impracticable forms. A moment arrives, certainly, when all of the soldiers escape either to the front or rear; but the organization, the combat methods, have no other aim than to put off this moment as long as possible.

"Man in battle, is a being in whom the instinct of

self-preservation dominates, in certain moments, all other feelings. Discipline, which aims at mastering this instinct by a still greater terror, is not able to wholly succeed here; it goes in this direction only to a certain point which cannot be passed.

"Assuredly, it is not necessary to deny the brilliant cases in which discipline and devotion have elevated men above themselves: but if these examples are brilliant, they are also rare; if they excite admiration, they are also to be considered exceptional; and exceptions prove the rule." *

Is it proper to include the bayonet charge in the category of manœuvres to be regarded as illusions? Every one to-day knows that on this point there is a great difference between legend and reality. Here, again, it is necessary to discriminate.

The killing of the enemy with the bayonet is surely only a picture of the imagination. But the forward march in good order, with a precipitate and resolute step, under the command of an energetic chief who leads you on, when the fire of infantry and artillery has shaken the lines of the defense, thinned its ranks, and weakened the intensity of its fire, at the moment, indeed, when the decisive action of the charge electrifies all hearts and affirms success,—the forward march, let us acknowledge, is an act full of reality, a practical movement whose moral influence is irresistible. And the more terrible and deadly are the effects of the fire, the more fertile in happy results will be this march, if executed at an opportune moment.

It is the necessary complement of the decisive attack; this it is that gives the finishing stroke to the already shaken moral force of the adversary. Victory will often declare in favor of the side which, in conducting

*Colonel Ardant du Picq, *The Modern Combat.*

such movements, is the more successful in maintaining order among the troops, and in developing a resolute ardor.

We hence see the value of these well-known truths, that every attack must be properly prepared; that it is absolutely indispensable to employ destructive force, in order to weaken moral force; that to annihilate the latter, it is essential to attain the decisive effect produced by the final assault; that to determine the moment for this assault, coolness, experience, and devotion are necessary,—a requirement which constitutes one of the heaviest obstacles in the way of properly exercising command.

How then before the combat may the *morale* of the troops be raised to its highest point? Confidence has given it birth, technical instruction has fortified it. But is this all; and in making an estimate of the proper value of the soldier, is there not one element which takes precedence of all others? This element is his military education. It is this that creates discipline; and this discipline is of such potency that all the rules of strategy and tactics may be summed up in a single one: *Be the stronger for the combat.* With it, one may dare everything. Bonaparte in the Rivoli campaign was able to engage the Masséna Division in marches and battles during four days and three nights. Napoleon at Jena did not hesitate to give battle with a river at his back. Frederick Charles at Sadowa could arouse two fatigued armies at night and lead them into action the next day. Alvensleben at Rezonville possessed the power to bring an army to a stand-still with his corps. Douay at Wissembourg was enabled, with 6,000 men, to maintain the struggle for eight hours against three corps; and MacMahon at Frösch willer was able to hold out for a day against triple forces.

"Discipline," says General Lewal, "rests entirely on

military education, the excellence of the *cadres*, and the military institutions."

These three elements, then, should be incessantly improved upon. But what is the proper method for this?

After our defeats, the idea was entertained of borrowing from the Germans the methods that had brought them victory. This was natural.

Yet, in point of military education and discipline, how can one avoid making allowance for the differences of race, origin, and social education, which distinguish our soldiers from theirs?

"The German," says a Prussian officer, "is imbued with a sentiment of duty and obedience; he accustoms himself to severe discipline; he is full of devotion, but does not possess an ardent temperament. Slow by nature, heavy rather than active, intellectually composed, reflecting, without either demonstrativeness or fervor; desiring victory, but not without *counting the cost;* obeying quietly and conscientiously, but in a mechanical way and without enthusiasm; fighting with resignation, valor, heroism; allowing himself, perhaps, to be sacrificed uselessly, but selling his life dear; he has not the martial sentiment; he is of a peaceable disposition; he has nothing in common with ambition; but he furnishes excellent material for war, by reason of his tractableness and stability. There are several qualities which he should especially acquire. He should be made to cultivate a will of his own, a feeling of personal impulsion, the tendency to go forward."

We see from this, that the discipline proper for the Germans would not be suitable for the French.

Ours has nothing of an absolute character. Resting upon an immutable principle, equity, it must often vary according to circumstances, and pass by turn from the severities which break the will of the soldier, to the emulation which stimulates him, or the sympathies which beget devotion.

But for a certainty, the moral education of the soldier merits our entire care.

This is a matter whose weight rests especially upon the officers and non-commissioned officers.

This mission gives them a right to regard and deference, which should make them comprehend its importance. This importance should never be lost sight of by themselves, and should serve to still further exalt their prestige and dignity in the eyes of their troops.

One of the ordinary obstacles in the way of the proper exercise of command is a general tendency to encroachment from the top to the bottom of the hierarchy, which manifests itself in all armies. It has the inconvenience of diminishing in the mind of the soldier the authority of his immediate commander, and in this way lessens the strength of discipline.

It is necessary to confess that our manners are repugnant to a Draconic severity, to efforts constantly on the rack, to austerity unmixed with indulgence. We better understand the confidence arising between men and their leaders as an effect of long acquaintance, and of dangers braved and fatigues and privations endured together.

In the establishment of suitable relations between officers and men, consists our most efficacious means of raising the *morale* of the troops and of preparing them for the rude ordeals of war.

After this rapid sketch of the elements constituting the moral power of armies, we are to study the tactical measures by which it may be overthrown and destroyed.

Here, the field to be reviewed is as vast as could be desired. It is however an error to believe that it would be useful to go back very far into history to learn the tactics of combats. The instruction left us by the great warriors of the past is surely for all time; it should be as eternal as their renown. But the tactical methods by which victory was insured in the wars anterior to 1866,

were very different from those in repute nowadays. In a campaign of the First Empire, for example, a marked superiority in cavalry was a decisive advantage; upon the field itself the infantry was not able to deploy, and was broken up before having a chance to defend itself.

To-day, these tactical results are impossible.

In many cases, one would form a false idea of the movements leading to success, by pushing his inquiries upon combat methods too far into the past.

Our aim being the study of modern war, it is expedient, in the connection we are considering, to confine ourselves to recent engagements, to combats fought with our present arms, and to seek, in analyzing them, the causes of victory and defeat.

§ 2.—COMBAT OF TRAUTENAU, JUNE 27; 1866.

1ST.—SITUATION.

On June 26 the Austrian army was in march from Olmütz to the Elbe; its first echelon, composed of three corps, had reached the upper course of this river. The 10th Corps, commanded by General Gablenz, was between Jaromir and Schurz. It had pushed the Mondel Brigade in the direction of Trautenau upon Prausnitz-Kaile.

The 4th Corps stood at Lancow, upon the right bank of the Elbe; and the 3d on the same side, westward of Königgrätz.

Turning to the Prussians, the Army of Silesia (II. Army), commanded by the Crown Prince, was approaching the frontier. Since the 24th its outposts had been engaged with the enemy, and its I. Corps (General Bonin) had on the 26th reached Liebau and Schömberg, on the hostile boundary.

On this day, General Bonin received orders "*to cross the frontier on the next day, move upon Trautenau, pass*

beyond this town, and if possible push his advanced-guard as far as Arnau."

Field-Marshal Benedek, warned of the approach of numerous Prussian columns upon his right flank, also issued an order at 8 P. M. of the 26th, containing the following instructions:—

"The 10th Corps will begin the march at 8 A. M. to-morrow, the 27th inst., after the troops have breakfasted. It will leave the bulk of its baggage in the vicinity of the fortress (Josephstadt), and take position at Trautenau. An advanced-guard will be pushed to the front. The 2d Regiment of Dragoons will be attached to this corps.

"Detachments of cavalry will maintain connection between the 10th Corps and the 6th, operating upon its right; and will cover the left flank in the direction of Arnau and Hohenelbe. The brigade detatched to Prausnitz-Kaile will rejoin the corps at the time of its passage."

In consequence of these two orders, an encounter between the I. Prussian and the 10th Austrian Corps became inevitable.

2ND.—COMPOSITION OF THE FORCES.

I. Prussian Corps.—This corps contained two divisions of infantry, the one of 13, the other of 12 battalions plus a pioneer battalion, each division accompanied by 24 pieces of artillery, a regiment of cavalry, and a section of litter-bearers; a brigade of reserve cavalry of 3 regiments, with 6 guns; an artillery reserve of 7 batteries, 3 of them horse batteries.

This gives a total of:—

25 battalions of infantry	25,000 men.
1 battalion of pioneers	1,000 "
21 squadrons	3,150 "
16 batteries (96 pieces)	2,500 "
Trains and different services	3,350 "
Total	35,000 men.

10th Austrian Corps.—This corps was divided into 4 brigades of infantry, each formed of 7 battalions with 8 guns. It had in addition a regiment of detached cavalry and an artillery reserve of 5 batteries.

Its total strength was:—

28 battalions of infantry	28,000 men.
1 regiment of cavalry (4 squadrons)	600 "
9 batteries (72 pieces)	1,500 "
Trains and various services	3,500 "
Total	33,600 men.

The advantage of numbers, therefore, lay with the Prussians, whose superiority consisted in cavalry and artillery. An advantage still more marked, but whose value can not be represented by figures, was assured them by the needle-gun.

3D.—PRELUDE TO THE COMBAT.

The I. Prussian Corps, at 4 A. M., set out from Liebau and Schömberg in two columns, which were to reunite at Parschnitz, rest here for two hours, and occupy Trautenau with the advanced-guard.

Following is the formation adopted for the march.

Right column, Lieutenant-General Grossmann:—

Leading section of advanced-guard, Colonel Beeren	2 squadrons, 2 battalions, 1 battery.
Main body of advanced-guard, Major-General Pape	3 rifle companies, 2 battalions, 2 batteries (10 pieces), 5½ squadrons, 1 company pioneers.
Corps infantry reserve, Major-General Barnekow	4½ battalions, 1 battery, ½ squadron.
Corps artillery reserve, Colonel Oertzen	7 batteries, 1½ battalions, 3 companies pioneers.

Detachment of flankers on the right, Colonel Koblinsky:—

1 squadron,
2 battalions,
1 company rifles,
2 guns.

Left column, Lieutenant-General Clausewitz:—

12 battalions,
1 regiment cavalry (4 squadrons),
4 batteries.

Corps cavalry reserve, Colonel Bredow:—

2 regiments cavalry,
1 battery.

The left column reached Parschnitz at 8 A. M. and halted, without sending a detachment to occupy Trautenau. This duty had been assigned to the advanced-guard of the right column. (*See Plate VI.*)

But the latter had been delayed by certain accidents, and did not gain the point of union until 10 o'clock.

In the meantime, Trautenau remained unoccupied.

The 10th Austrian Corps had likewise been ordered forward. The Mondel Brigade, leading the advance, had instructions to take post at Trautenau and await the arrival of the remainder of the corps.

The Grivicic, Wimpffen, and Knebel Brigades were to follow.

The Mondel Brigade reached Hohenbrück, a mile and a quarter from Trautenau, at about 8 A. M., simultaneously with the arrival of the left Prussian column at Parschnitz.

The enemy being discovered, the Austrian column deployed, assumed the combat formation, and moved upon Hopfenberg, an elevated plateau south of Trautenau, which dominated the valley of the Aupa. In the

meanwhile, the cavalry scouts of the two armies had met upon this stream, and the Austrian regiment (Windischgrätz) deputed to watch the frontier, had fallen back upon Hohenbrück.

Presently, the advanced-guard of the right Prussian column arrived at the Aupa bridge, and its leading section, its main body, and the right detachment, successively pushed their infantrymen upon Trautenau, with directions to ensconce themselves in the houses on the south side, and open fire. Kriblitz was also occupied. The squadrons of the advanced-guard had, at the outset, been assailed by the Windischgrätz Regiment, which met with repulse. The Prussian infantry then moved out of the town to the west, and attempted an attack upon the Galgenberg, which ended in failure. The Mondel Brigade then determined upon a counter-offensive; but in descending towards Trautenau its infantry was brought to a halt by the forces sheltered in the houses of this place.

4TH.—DEVELOPMENT OF THE ACTION.

At about 11 o'clock, General Bonin arrived upon the scene. His main forces at the same time were debouching from Parschnitz. He found the Austrian position too strong to be carried in front, and resolved to turn it by the right, in the direction of Alt-Rognitz. Directing to this side two regiments and a battery from the left column, he at the same time gave orders to General Pape to make a vigorous frontal attack. Lastly, he placed upon the heights northward of Trautenau, three batteries, a battalion, and a cavalry regiment, for the purpose of holding under observation the country in the direction of Arnau, and of having a force in readiness to cover the retreat in case of need.

The flank attack, retarded by difficulties of the ground, had hardly assumed shape when the troops

assaulting in front succeeded in forcing the Mondel Brigade to retire. The latter had been contending with superior numbers. General Gablenz recognizing this fact, had ordered it to withdraw to Neu-Rognitz, there to await the arrival of the remainder of the corps. It slowly fell back fighting, and took up new ground upon the skirts of the wood situated to the north of Neu-Rognitz.

The enemy, exhausted, was not prepared to make a vigorous pursuit; but he still, however, continued his forward movement. Colonel Koblinsky, after his frontal attack, moved upon Hohenbrück with three and a half battalions, followed closely by three others, while the troops of the left column marched upon Alt-Rognitz.

At about 1 o'clock, the division of the Guard assigned to the duty of supporting the I. Corps, reached Parschnitz, and offered assistance, which was declined, the Austrians appearing to be in retreat. The Prussians could, however, gain ground to the front only by vigorously continuing the contest. The infantry was distributed into company columns which acted separately; and under the influence of the combat and the difficulties presented by the ground, a certain amount of disorder prevailed, and tactical connection was somewhat impaired. Still, by 3 P. M. the assailants had succeeded in establishing themselves upon the Hohenbrück, Alt-Rognitz line, while the infantry reserve coming up, was installed at Kriblitz. Soon the firing ceased. The combat seemed to have terminated in favor of the Prussians.

The Guard set out for Eypel.

Here is the situation at about 3:30 o'clock. (*See Plate VI.*)

The Prussians had 7 battalions before Hohenbrück, supported by 3 others at Trautenau and by 3 batteries upon the heights southward of this place.

To the north and north-east of Alt-Rognitz were posted 5 battalions with a battery and 2 companies.

The infantry reserve (4½ battalions, a battery, and a half squadron) stood at Kriblitz.

Three battalions, the entire cavalry, and numerous guns, remained disposable northward of Trautenau.

To recapitulate, the I. Corps had engaged 16 battalions, 4 had failed to arrive in season, and the remainder was in reserve or detached on escort service. Of the artillery, only the 8 divisional batteries had taken part in the action.

These troops had been held in check until 3:30 P. M. by a brigade of 7 battalions, a regiment of cavalry, and a battery of 8 guns, reinforced towards noon by a second battery, and at about 1 o'clock by two other batteries.

This situation was about to meet with an unexpected change.

5TH.—DECISIVE ATTACK.

Towards 3 o'clock the Grivicic Brigade reached Neu-Rognitz, deployed upon the ground already taken up in front of Alt-Rognitz, and moved forward, the first line in echelon, preceded by a chain of skirmishers, the second acting as reserve. At the same time the Mondel Brigade took the offensive.

At sight of this, General Bonin ordered a forward movement against the Austrians without awaiting their attack. He pushed upon Trautenau the three available battalions, shifted his cavalry to the right bank of the Aupa, brought three new batteries into action, and established his infantry reserve upon the Hopfenberg, to guard his rear should the necessity arise of beating a retreat.

The first attempt of the Grivicic Brigade upon Alt-Rognitz, being received by a well-sustained fire of infantry at easy range, was brought to naught.

After relieving the overtaxed troops of the first line, the frontal attack was renewed, in conjunction with a demonstration upon the left flank of the Prussians. The latter, unsupported, gave way, without awaiting the arrival of the enemy, drawing off toward Parschnitz. This was between 4 and 5 P. M.

The Mondel Brigade was content to support the force of Colonel Grivicic. But, in the meantime (about 4 o'clock), the Wimpffen Brigade had in its turn reached Neu-Rognitz. General Gablenz immediately deployed it, and threw it forward to the north of the village, among the groups of the enemy. The Austrian batteries also entered into action.

General Grossmann, far from being able to move his troops forward, perceived that they were shaken by the fire of the Austrian batteries, and out of condition to continue the contest.

Soon the entire Prussian line fell back before this counter-offensive; the right, following the example of the left, broke into retreat upon Altstadt, without heeding the orders of its leaders. (*See Plate VII.*)

The Wimpffen Brigade was then launched forward upon the Hopfenberg, but it was arrested by a well directed infantry fire, and forced to retire toward Hohenbrück.

The Knebel Brigade now arriving, suffered itself to be drawn into a renewal of the assault. But the Hopfenberg was stoutly defended by two Prussian battalions that well comprehended the necessity of protecting the retreat.

They repulsed the first efforts of this brigade also, and held their ground until 6:30 P. M. Retiring then before a final attack by General Knebel's second line, they took the direction of Parschnitz, and were rallied in the wood situated to the south-west by a battalion of rifles, which for this purpose had taken post on its border. The fire

of the batteries of the Grivicic Brigade had silenced the Prussians in this quarter.

The latter were completely beaten, and towards 9 P. M. the Austrians were in occupation of all the hostile positions.

General Bonin, seeing the day was lost, thought to collect his forces to the north of Trautenau, and establish them upon the heights. But the various bodies were disorganized and routed. They fell back in confusion as far as the frontier, and regained their cantonments of the morning.

The Austrians bivouacked upon the field, and occupied Trautenau. The Wimpffen Brigade was charged with the service of the outposts, which were established upon the heights northward of Trautenau. The headquarters were at Neu-Rognitz.

6TH.—RESULTS OF THE COMBAT.

The Prussian casualties were 1338 killed and wounded, or only 3.8 per cent. of the forces engaged; while the losses of the Austrians reached 4787, or 14 per cent. Nevertheless the success of the latter in this action was clearly affirmed. Its result was to throw back beyond the frontier and disorganize an entire army corps.

Unfortunately a tactical error committed on General Gablenz's right was, the next day, to nullify the consequences of his victory.

7TH.—COMMENTS.

The combat of Trautenau is one of those which present to us the most clearly, the conditions under which the Prussians may be defeated.

Its features may be recapitulated as follow:—

A first frontal thrust was directed by the advanced-guard brigade against the position of Trautenau, occupied by an Austrian brigade. The latter, well posted and energetically commanded, repulsed it.

A second Prussian brigade having come to the support of the first, the attack was renewed against the front and right flank of the Austrians. The latter, continuing their fire, slowly fell back to a good position in rear, maintained the combat until quite late in the afternoon, and then ceased firing.

The Prussians, who were unsupported, desisted from further advance, notwithstanding their great numerical superiority; and, confident of success, occupied themselves with the reorganization of their units.

In reality, although their losses were comparatively small, these troops, fatigued by the physical efforts required by a march and combat in a difficult region, and demoralized by the character of the struggle, were out of condition to continue the action.

The Austrians having received reinforcements, seized the offensive. The enemy, his tactical bonds already broken, gave way before a menace to his left flank and the artillery fire directed against his infantry.

The groups still intact made a brief resistance to the assaults of the victor; but the remainder, unheeding the voice of their commanders, retreated in disorder.

Thus at Trautenau, an Austrian corps had succeeded in defeating a Prussian corps of about the same numerical strength, but having at its disposal much more powerful means of destruction.

To what is this result attributable? The official Prussian account has replied as follows to this question.

"During this entire day, the I. Corps contended under unfavorable conditions. This sprang from the fact that it had at the outset neglected to occupy Trautenau and the heights dominating it; and this error was sufficient to prevent the proper debouching of the principal forces.

"Thus the numerical superiority possessed at the beginning availed it nothing. While the main body of

the column remained inactive on the near side of the Aupa, beyond the river only isolated detachments were brought into action; their supports were sent them by installments; the whole force therefore not being in position to oppose the enemy, the engaged troops were obliged to fall back before his steadily increasing numbers.

"The infantry fought almost alone; little aid was lent by the cavalry, and the greater part of the artillery remained in positions too remote to permit it to play an effective part upon the real field of combat.

"The Austrians, on the contrary, free in their movements, brought all arms of the service into action, and profited from the superiority given them by their artillery.

"The 1st Division of the Guard was permitted to remain at Parschnitz until 2 P. M., despite the fact that by being thrown in mass upon the enemy's right flank, it would have produced a decisive effect; this advantage was allowed to escape. The division marched away from the scene of action, just as the enemy had concentrated his forces, and was returning to the attack.

"The battalions and companies, detached one by one from all the brigades, made a most obstinate resistance. The enemy, whose losses had been considerable, was likewise somewhat fatigued. The greater part of his forces did not arrive until late in the afternoon; and this indicated that he also had made a march. The Prussians could still think of bringing all their forces together on the near side of the Aupa, and of opposing a considerable obstacle to the enemy, in case of an attempt to debouch from Trautenau; it was also possible to make some use of the cavalry, the greater part of which was still intact, and the position taken up by the reserve artillery might likewise be turned to account.

"The whole question now was to hold the issues of the defiles of the Riesengebirge; for the advance of the rest of the corps would free the entire force.

"Such was the intention of the General: he wished to take position northward of Trautenau, near Parschnitz, where his trains had already arrived.

"But the parts which had fallen back in retreat upon the latter place, had passed it and taken the high-road beyond.

"This circumstance obliged the General to abandon the idea of prolonging the resistance; his force continued its retreat; the troops, completely fatigued, between 1 and 3 o'clock regained the bivouac on the other side of the hills, quitted the morning before."

The first error had then been committed by the left Prussian column. Being in march on the offensive, and finding the *débouché* at Trautenau undefended, this detachment should have occupied it and seized the heights to the south commanding it.

It is probable that the troops upon reaching Parschnitz had not acted thus, because they counted upon the immediate arrival of the advanced-guard which had been delegated for this duty.

This is not all.

If the Mondel Brigade successfully resisted the first Prussian attack, it was because the forces were equal and the character of the ground gave a marked advantage to the defensive.

Two-fold numbers, coupled with a flank attack, were necessary to drive the Austrian brigade from position.

The energy displayed by the latter in the struggle, the tactical cohesion of its regiments, and the support of good artillery, had enabled it to efficiently contend against two hostile brigades.

Its resistance had induced the belief that its forces were much in excess of the actual number: it had obliged the adversary to deploy his troops, engage and fatigue them; and, further, it had checked him, and thus permitted the bodies in rear to come up at an opportune time.

In the last place, the successive entry of the newly-arrived troops into the fighting line, had given the finishing stroke to the chances of the Prussians.

It is even probable that the concurrence of the Knebel Brigade was not necessary to decide success; and that, according to the intention of General Gablenz, the better course would have been to hold it in reserve.

One fact deserving notice is that the Prussians failed to turn to account their superiority in artillery and cavalry.

These results are the more striking upon considering that the ascendency of the needle-gun was signally pronounced and enlisted a considerable advantage on the side of the invader. It has been observed, indeed, that in its attacks the Austrian infantry in most cases executed resolute forward marches, without waiting until the adversary's line had been shaken by a well-directed preliminary fire. In such instances, if the Prussians remained firm, and fired upon the assailing columns at easy range, the attack invariably failed.

The peculiarities were, then, superiority of fire on the side of the Prussians, and upon the part of their adversaries premature forward marches, and insufficient preparation for offensive movements.

It has been said that General Bonin should have awaited the arrival of his principal forces before engaging. It was natural, however, that the action should have been opened as it was by the troops as they successively arrived.

Moreover, when the combat was fairly under way, the greater portion of the Prussian forces were already in line.

The real causes of the reverse are no doubt those which the Prussian general-staff has stated as follow:—

Neglect to occupy the heights of Trautenau;

Failure to accept the assistance of the Guard division.

With this aid it is probable that the second attack of the Austrians would have been checked. They would, indeed, have been too strongly assailed upon their right flank to hope for success. And had the Prussians brought all their batteries into play, they would have been assured of an overwhelming artillery fire.

This combat shows again how important it is to have the numerical superiority at any price, and to retain it while there is a prospect of a hostile encounter. And it also sets in relief the chances of victory always possessed by the side that knows how to keep strong masses in reserve, with the design of successively pushing them into the fighting line toward the end of a contest which has already exhausted the adversary.

We gather further from this engagement that artillery by itself can shatter the power of rapid-firing small arms; that its action should precede all attacks executed by infantry; and that such thrusts should be made only when the defense has been weakened, and with a view to securing a decisive result.

§ 3.—BATTLE OF 18TH AUGUST, 1870.—COMBAT OF ST.-PRIVAT.

1ST.—SITUATION.

French Army.—On the morning of 18th August, 1870, Marshal Canrobert's corps, which had arrived the evening before from the vicinity of Rezonville, occupied the following positions on the right of our line:—

1st Division (Tixier), right in the forest of Jaumont, left at Roncourt (*See Plate VIII.*);

2d Division (Bisson), composed only of the 9th Regiment of the Line, at Roncourt;

3d Division (Lafont de Villiers), between Roncourt and St.-Privat;

4th Division (Levassor-Sorval), at St.-Privat-la-Montagne and Jerusalem.

The strength of the 6th Corps, after the battle of Rezonville, did not exceed 25,300 men and 48 guns.*

It is necessary to add to these figures the 1st Division of Reserve Cavalry (Du Barail), reconstituted from the 2d Chasseurs d'Afrique and the Bruchard Brigade, of the 3d Corps, or about 2,000 men, 2,000 horses, and 12 guns.

The defense of the points of support for our right upon the plateau of Amanvillers was then entrusted to a force amounting in the gross to 28,000 men supported by 60 guns.

The heights of Roncourt and St.-Privat constituted the position to be held by the Canrobert Corps. The first of these heights was formed by a ridge which descended from the vicinity of Malancourt; the second, situated about 1600 yards to the south, had the aspect of a commanding plateau, its approaches open, its top covered with massive buildings, its sides sloping gradually down in the direction of Amanvillers on the one hand and Habonville on the other. It was the central point of the defense.

The village of St.-Privat comprised two groups of dwellings, one to the north-east, the other to the south, the latter bearing the name of Jerusalem. Upon the west face extended wall-inclosed gardens, offering excellent cover for infantry.

A little over four hundred yards further on, the ground fell away somewhat abruptly, forming a sort of crest, which constituted a natural front for the defense.

Slight ridges, from a mile and a quarter to about two miles long, denuded of trees, and with but few inclosures or undulations, extended with easy descent from

* Marshal Canrobert declared before the council of war at Versailles in 1873 that his effective could not be counted at more than 26,000 men, and that at St.-Privat he did not have a single mitrailleuse.

these heights towards the west and south. The base of the slopes terminated in a ravine, which, starting near Amanvillers, ran westward to a point above Habonville, where it turned northward and lost itself in the valley of the Orne near Auboué.

This ravine, somewhat shut in after leaving Habonville, sheltered the assailant from the fire of St.-Privat. But, on the other hand, the ridges connecting it with this village furnished our sharpshooters an advantageous field of fire; and in this resided the principal strength of the defense.

The villages of Ste.-Marie, St.-Ail, and Habonville, situated upon this terrain, and about a mile and a quarter distant from the centre of the position, formed its advanced-posts.

A good road connected the heights with the highway from Metz to Briey, traversing them from east to west.

The weak point lay upon the right flank. Roncourt had, by itself, but a limited defensive value, and could be easily turned by the north and east, where clusters of villages, patches of woods, and folds of the ground, favored the assailant.

Our troops had not had time to fortify themselves.

No works had been thrown up to strengthen the right; St.-Ail had not been occupied, Ste.-Marie had neither been loopholed nor barricaded, and only a few shelter-trenches had been dug upon the approaches to St.-Privat.

German Army.—After employing the 17th August in effecting its concentration, the German army, on the morning of the 18th, commenced, to the north of the Metz-Verdun road, the march in echelon, which has been previously described. The Guard arrived at Mars-la-Tour; the XII. Corps at Jarny; the X. at Tronville. Reconnaissances made to the north and east had de-

veloped the information that our forces were in position from Amanvillers to the Bois-de-Vaux.

Conformably to the instructions received from the King of Prussia to deliver battle, Prince Frederick Charles, commander-in-chief of the II. Army and the other forces assembled upon the left bank of the Moselle, at 11:30 A. M. dispatched orders for the attack, to his various corps.

Those sent the Royal Guard and the XII. and X. Corps were thus expressed:—

"*2.—Orders for the Guard.*

"The enemy appears to be in line of battle upon the heights extending from the Bois-de-Vaux to beyond Leipsic. The Guard will hasten its movement by way of Verneville, and will prolong it as far as Amanvillers, from which place it will, in concert with the IX. Corps, make a vigorous enveloping attack upon the enemy's right wing.

"* * * The Guard may, so far as is still practicable, utilize the road through Habonville to Amanvillers."

"*3.—Orders for the XII. Corps.*

"The XII. Corps will move upon Ste.-Marie-aux-Chênes, cover itself by cavalry towards Briey and Conflans, and if possible throw a mounted force into the valley of the Moselle, in order to cut the railroad and telegraph line to Thionville."

"*4.—Orders for the X. Corps:*

"The X. Corps will remain as support in second line, towards St.-Ail."

In consequence of these orders, the various Prussian corps, wheeling to the right, moved in echelon upon our lines.

Vigorously received by the Ladmirault Corps as soon as it arrived within range, the IX. Corps found itself engaged in a hot contest before the hour fixed, and presently the battle became general.

The enemy had been acting under the impression that our right extended no farther than Amanvillers. The Prussian Guard, which at Bruville and Doncourt had received orders to march upon Verneville and Habonville, discovered the error, however, upon its approach to the latter place.

It ascertained then that we occupied St.-Privat, and therefore decided to simply enter the line on the left of the IX. Corps.

The XII. Corps (Saxon) began the execution of the turning movement against our right, sending the 24th Division upon Ste.-Marie-aux-Chênes and the 23d upon Coinville and the woods eastward of Auboué.

The X. marched upon Batilly.

The attack against our 6th Corps was then to be committed to two corps supported in rear by a third. The number of these forces, making allowance for the losses of the 16th, reached :—

Guard	40,000 men, ...	90 guns.
XII. Corps	40,000 men, ...	96 guns.
X. Corps	31,000 men, ...	84 guns.
Total	111,000 men, ...	270 guns.

Of this mass, 80,000 men and more than 200 pieces were put in readiness to assail the already severely-tried troops of Marshal Canrobert.

2ND.—PRELUDE TO THE COMBAT.

During the morning of 18th August, reconnoitring cavalry was thrown out towards the west by the 6th Corps; but no signs of the march of the Prussian columns were discovered, and our troops had begun to feel a sense of security, when a cannonading burst forth in front of the Ladmirault Corps.

The divisions immediately flew to arms. Marshal

Canrobert, rectifying his lines, sent his 1st Division to the left to connect with the 4th Corps, and directed General Lafont de Villiers to send forward a regiment for the occupation of Ste.-Marie.

After the execution of these movements, therefore, the 6th Corps was distributed as follows :—

On the right, General Bisson with the 9th Regiment of the Line occupied Roncourt and the slopes to the west, between this village and St.-Privat, faced towards Ste.-Marie. (*See Plate VIII.*)

In the centre, about 450 yards in front of St.-Privat, were posted the 3rd and 4th Divisions, their second brigades in second line, their first holding two battalions of each regiment in advance of St.-Privat, and the third in the village itself.

In rear, upon the height, opposite the space separating the 2nd and 3d Divisions, were stationed the 8 batteries of the 6th Corps.

General Du Barail's two batteries had taken up position south of St.-Privat.

In the 1st Division (Tixier), the Péchot Brigade was established as a front line, between St.-Privat and the right of the 4th Corps, the 9th Chasseurs (Commandant Mathelin) first, the 4th Regiment of the Line (Colonel Vincendon) in the centre, and the 12th (Colonel Lebrun) on the outmost flank.

The 2nd Brigade (Leroy de Dais) stood in rear of the 1st in battalion columns, having behind it the Du Barail Cavalry Division.

The troops of the first line, in advance of St.-Privat, as a rule held two battalions of each regiment in front, the third in reserve.

From the Lafont de Villiers Division, the 94th Regiment (Colonel de Geslin) of the Colin Brigade was directed upon Ste.-Marie-aux-Chênes, the brigade general accompanying it.

This regiment, which had already lost 24 officers and 540 men at Rezonville, was to leave 3 companies at St.-Privat at the disposal of the chief-of-staff. There remained, therefore, for the defense of Ste.-Marie only 2½ battalions, whose effective did not exceed 1450 men. Upon reaching the village, the 2nd battalion was established to the right in the part situated on the side of Auboué; the 3d to its left, facing south and south-west, the last company disposing men in ambush in the ditches along the Metz road; the 3 companies that remained of the 1st battalion were held in the interior of the village as a reserve.

These dispositions were not yet finished, when the enemy opened fire.

At about 12:30, indeed, the 1st Division of the Prussian Guard arrived at a point near, and to the south of Habonville.

Its 4 batteries unlimbered against our position at St.-Privat. In order to render the fire more effective, however, they soon moved to a new post south-west of St.-Ail, where 5 batteries of the corps artillery hastened to join them.

Marshal Canrobert pushed his guns to the front, responsive to this artillery; but unable to hold their own, they soon returned in retreat.

Unfortunately, we had not had opportunity of replenishing the artillery ammunition after the action of the 16th.

The caissons were two-thirds empty. It was necessary to send to the commander-in-chief for a new supply; and henceforth we restricted ourselves in this quarter to a partial return of the enemy's fire.

The latter, however, notwithstanding his advantage, was not able to move his pieces to the front. Our skirmishers, distant but 900 yards at the farthest, overwhelmed them by their fire, and prevented an advance.

The Germans found themselves driven to the necessity of gaining possession of Ste.-Marie before proceeding to the assault of St.-Privat.

3RD.—ATTACK OF STE.-MARIE-AUX-CHÊNES.

The 3rd Battalion of the 94th Regiment had scarcely begun firing upon the Prussian batteries beyond St.-Ail, when it was attacked in its turn, first by the skirmishers posted northward of this village, then by others advancing in the ravine to the west. Four battalions of the Guard invested our advanced-post to the south and south-west, when the fire of the defenders, redoubling in intensity, baffled the assailant's attempts to make further progress.

General Pape, commanding the 1st Division of the Guard, perceived that he could put a term to our resistance only by calling artillery to his aid. Ten pieces immediately opened fire upon Ste.-Marie. Our troops, although feebly supported by the batteries at St.-Privat, replied with vigor. Our antagonist in this vicinity, judging his efforts insufficient, asked the assistance of the 24th Division (Saxon) now approaching Ste.-Marie, and it dispatched its 4 batteries to this side.

Then the artillery of the XII. Corps and 3 batteries of the 23rd Division, which were marching upon Auboué, successively came into action to strengthen this line of fire. Soon the 1st Division of the Guard and the 24th Division were engaged in the attack.

At 2:30, the two and a half battalions of our 94th Regiment were obliged to contend against 33,000 men and 102 guns; and notwithstanding their inferiority, they defended their post with energy.

Encouraged by the presence of their brigade commander, and Colonel De Geslin, Lieut.-Colonel Hochstetter, and Commandants Horcat and Froidevaux, who went from point to point setting personal examples,

these troops thought only of presenting a determined front to the dangers threatening them. The reserve companies were brought into line, and the fire continued without interruption upon the hostile forces, which seemed to grow in number around the village.

Yet this unequal struggle could not last long. Our ammunition was sensibly diminishing, and the Germans were gaining ground to the south-east. When our fire began to slacken, General Pape decided that the way for the attack had been sufficiently prepared. He concerted with the commander of the 24th Division (Saxon), "with a view to a combined and simultaneous attack upon Ste.-Marie, the 1st Division of the Guard operating from the south and south-west; the Saxons, from the north and north-west.

"In the Guard Division, there were ready for this purpose in front line the four battalions previously thrust forward toward the village, while the others formed a direct support or were held still in reserve.

"On the side of the Saxons, the attack was to be executed by seven battalions of the 47th Brigade. The fractions of the 23d Division, at this moment approaching the scene of action, also prepared to concur in the operation."*

* * * * * * * * * *

"When Generals Pape (1st Division of the Guard) and Nehrhoff (24th Division) deemed that the converging fire of artillery had produced a sufficient effect, the order for the assault was given, and at about 3 o'clock all the troops almost simultaneously put themselves in motion."

Twelve thousand men, supported in rear by about nineteen thousand, were thus to attempt an enveloping attack upon our 1400 defenders of Ste.-Marie. At 3 P.

* Only one battalion of this division, however, took part in the attack against Ste.-Marie.

M. this offensive movement assumed form to the west and south.

Upon the approach of these masses, the fire of the 94th Regiment waxed doubly vehement. But this time the enemy gained ground, and it became evident that there was no hope of stopping his advance. The defense continued, however, until the Germans had flanked the village to the south-east. At this point in the action, the ammunition had begun to run low; General Colin was wounded; 13 officers out of 40, and more than 300 men, were *hors de combat.* Colonel Geslin, believing that further effort would be unavailing, and fearing to compromise the safety of the command, gave orders for the evacuation of Ste.-Marie. The retreat was made upon Roncourt by the ravine extending toward the north, under the protection of three companies of the 1st Battalion, and further aided by an offensive movement on the part of two battalions of the 91st Regiment, which moved forward upon the road from St.-Privat to Ste.-Marie. The withdrawal was accomplished without difficulty. The 94th then assembled at Roncourt, and took up position on the skirts of the forest of Jaumont.*

4TH.—FIRST ATTACK UPON ST.-PRIVAT.

We had scarcely abandoned Ste.-Marie when the Germans swarmed into it. The greater part of the two divisions co-operating in the attack, had, in precipitating themselves upon the place, become disintegrated, and considerable confusion ensued. It was necessary to

* The official Prussian report upon the taking of the village of Ste.-Marie calls it a regular capture by assault (Section VI., page 724). As to the soldiers of the 12th Regiment of the Line and other regiments, which according to the Prussian account were captured in this vicinity, it may be said that these were simply stray men. The above details of the defense made by the 94th Regiment are taken from the history of the regiment, revised by Colonel Geslin.

reform the various units, and then separate them. The Guard occupied the village; the Saxon Division, the ravine to the north.

The artillery advanced until abreast of the eastern issue from Ste.-Marie, and thenceforth directed all its blows upon the defenders of St.-Privat. Our guns were almost reduced to silence, firing only at intervals. The enemy from this time began to pour down his projectiles upon the village and the troops in its front.

On the other hand, the Saxons extending farther and farther to the north-east of Ste.-Marie, seemed to take Roncourt for their objective. We had already espied their columns in movement in the direction of Auboué.

Marshal Canrobert judged it expedient to endeavor to check all further attempts of the enemy's forces on the side of Ste.-Marie.

In consequence, our artillery made a fresh effort to move to the front, in order to lend assistance to the 91st Regiment in the direction of this village. But our guns were soon forced to draw off, and even to cease firing. The two batteries in position to the south of St.-Privat alone maintained the action, taking for targets the enemy's artillery and the exit of Ste.-Marie.

The Prussian Guard, however, did not seek to continue its offensive upon St.-Privat. It was necessary for it to await the effect of the turning movement in process of execution to its left.

Meantime the Saxons advanced. The 9th Regiment of the Line, which had been watching their progress, received them with a well-sustained fusillade. It was supported by the 1st Battalion of the 91st Regiment. Although deprived of artillery and without reserves, these troops succeeded in checking the seven battalions arrayed against them. It was not long, however, before the assailants received word to fall back, conformably to the instructions of their general-in-chief, who wished to

hold the offensive movement in leash until the forces directed upon Auboué and Montois had deployed. The defense was thus afforded a temporary respite.

In the meanwhile, at about 2 o'clock, the vast movement against our right flank, which had begun to the west of Ste.-Marie, was in part covered by the attack of the 24th Division, in the first instance, and subsequently by the powerful artillery fire referred to.

Twelve Saxon batteries had established themselves upon the brink of the ravine to the north of Ste.-Marie, adding their fire to that of the ten batteries of the Guard, in position southward of this village; while at the same time the eight batteries unlimbered to the south-east of St.-Ail continued in action. A hundred and forty-four guns rained their missiles upon us; but we were not in condition to make an effective response.

Towards 5 o'clock the presence of fresh assailants in the woods to the east of Auboué was noted. These, the advanced troops of the 45th Brigade (23d Division), seemed to threaten Roncourt. The Marshal then called forth General Du Barail's cavalry. But this force was scarcely able to pass to the west of St.-Privat. Overwhelmed by the shells of the enemy, it was forced to give up the charge.

Upon seeing a new attack preparing in its vicinity, the 9th Regiment pushed forward a battalion in the direction of Montois, which left a company at Roncourt.

The moment had now arrived for the Marshal to reinforce his right. He ordered up the Péchot Brigade, which was put in position to the north of the village, replacing it by the Leroy de Dais Brigade.

While these changes were taking place, the movements of the Saxons upon Roncourt were becoming more and more pronounced.

The 23d Division had, in this regard, received the following order, while advancing into the woods eastward of Auboué:

"Colonel Schulz, having with him the 48th Brigade, reinforced by the 1st Cavalry Regiment and three batteries of the 1st Mounted *Abtheilung*, will continue his march in the Orne valley until abreast of Joeuf and Montois, when he will move, by way of the latter place, upon Roncourt.

"General Craushaar, with the 45th Infantry Brigade, will drive the enemy completely out of the woods, and move forward upon Roncourt from the west, as soon as Colonel Schulz has made his presence felt to the north of this place.

"The disposal of the 46th Brigade is provisionally reserved."

As a result the Canrobert Corps had around it, towards 5:30 P. M. :—

The 47th Brigade (Saxon), to the north of Ste.-Marie. The artillery of the XII. Corps (Saxon), to the left rear of this brigade, and partly masked by it. (*See Plate IX.*)

The 45th Brigade, gaining ground in the woods between Auboué and Roncourt.

The 46th Brigade, near Coinville.

The 48th Brigade, with two batteries and two regiments of cavalry, in march from Auboué upon Joeuf, in order to take the road to Montois.

Two squadrons thrown towards the Moselle, to cut our communications with Thionville.

Two regiments of Uhlans, to the west of the Orne, watching the roads from Briey and Étain.

Farther to the south, the 2d Division of the Guard had come into the field, sending its 3d Brigade to the assistance of the IX. Corps, while the 4th took post at St.-Ail. Its artillery had just entered into action between this place and Habonville, directing its fire against the left of the 6th Corps. The regiments of divisional cavalry were placed to the south and west of Ste.-Marie.

The way for these movements was prepared by 180 pieces of artillery, to which we were able to oppose only two batteries. Seeing that the ammunition for which application had been made to Marshal Bazaine, did not arrive, request for some was made of the 4th Corps, which deprived itself of three or four caissons.

"Before this formidable array of forces," says the Prussian report, "the French artillery, much less numerous, had almost ceased firing, reserving itself for the moment, now near at hand, when the German infantry would begin its attack."

Everything, indeed, seemed ready for the assault upon St.-Privat.

With us, it was felt that a desperate crisis was at hand.

The changes made in our line to the north and south of the village, had been observed by the commander of the Prussian Guard.

Judging that they were the consequence of the turning movement of the Saxons, he concluded that this manœuvre was sufficiently under way, and with the sanction of Prince Frederick Charles, who was anxious on account of the lateness of the hour, gave the signal for the attack. Responsively, the 4th Brigade of the Guard advanced in combat formation from St.-Ail toward St.-Privat. This was at 5:30 o'clock, while we were in the act of taking up our second position.

The commander of the 1st Division called the attention of the corps commander to the fact that the way for the attack had not been fully paved; but, notwithstanding, this division was also ordered forward. The 1st Brigade was directed upon the houses in the southwest corner of St.-Privat; the greater part of the 2d remained in reserve at Ste.-Marie, but one of its regiments followed the 1st as a support, at a distance of 600 paces.

Turning again to our side, the skirmishers were able to discern the two strong attacks now preparing, the one southward of the Ste.-Marie road, the other to the north. The Sonnay and Gibon* Brigades, as well as the 93d Regiment and the Leroy de Dais Brigade, made dispositions to receive them.

A regiment of the 4th Brigade of the Prussian Guard commenced the action by a direct open march upon our left. Met by a hail of missiles, it was soon brought to a stand.

The regiment following deployed in turn, and was able to gain a little ground, thanks to two batteries which successively came to its aid. But it was however unable to proceed beyond the line of the road tending south-east from Ste.-Marie.

In reality, the 4th Guard Brigade, riddled by the fire of our chassepots, was shaken in *morale*, and forced to suspend its forward march.

Simultaneously with the execution of this offensive stroke, a second attack was attempted directly upon St.-Privat over the ground to the north of the Metz road; but it also broke down under the effects of our fire. The regiment essaying it, unable to make progress to the front, bent off toward the north, and endeavored to advance obliquely against the centre of our positions. Our discharges, however, inflicted such sensible losses, that it was obliged to pause abreast of the 4th Brigade, leaving a considerable break between itself and the latter. Another regiment was immediately thrown forward to fill this gap.

Our infantry fire had acquired a formidable intensity. Favored by the bare slopes to the front, it had produced

* Colonel Gibon of the 25th Regiment commanded the 1st Brigade of the 4th Division, replacing General Marguenat, killed in the battle of the 16th.

such a deadly effect upon the ranks of the enemy, that his efforts had been paralyzed, and it was felt that, although he remained facing our lines, he had been materially weakened. If we had been able at this moment to take a vigorous offensive, our action might have been crowned with success. But we, in turn, had been severely bruised by the enemy's projectiles; our losses were sensible, and, in addition to the reduced state of our ammunition, we had now to allow for the fact that our troops were becoming exhausted.

The situation at this point has been epitomized thus by the Prussian general-staff:—

"This first bold onslaught of the Prussian infantry upon St.-Privat had not therefore been decisive. The power of the attack was for the moment crippled. Thousands of dead and wounded strewed this blood-stained field."

* * * * * * * * * *

"During the whole time the situation had been very critical; for, although the right of the 1st Brigade had been strengthened by the arrival of the 2d Regiment, the enemy being sheltered must have sustained but relatively small losses, and at any instant might be expected to deal a vigorous counter-stroke, and throw back upon Ste.-Marie the now unstable lines of the assailants.

"But, *strange to say*, he attempted nothing of this kind."

In brief, this first attack of the Prussian Guard was executed by about 23,000 men supported by 180 guns.*

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*The Prussian forces were thus composed:—

4th Brigade of the Guard,	7	battalions, about	. . . . .	7,000 men.
1st " " " "	7	" "	. . . . .	6,000 "
2d Regiment " "	3	" "	. . . . .	3,000 "
2d Brigade (in support)	7	" "	. . . . .	7,000 "
Total				23,000 men.

It was repulsed by 18,600 men and two batteries.*

5TH.—ATTACK UPON RONCOURT.

After the check experienced by the Prussian Guard, General Du Barail endeavored to launch upon the enemy a regiment of Chasseurs d' Afrique. But this charge being arrested by the fire of the enemy's skirmishers, brought no useful results. Meanwhile, the German generals were considering the means of renewing the attack in a way bespeaking more chances of success than seemed to be enlisted in the first attempt.

General Pape, at the outset, reinforced the left of his line of battle by a battalion drawn from the reserves at Ste.-Marie.

He then arranged with the commander of the 2d Division of the Guard to overwhelm our positions by the fire of all disposable artillery. From this time St.-Privat and Roncourt became marks for all the enemy's guns. The batteries covering the assailant's wings drew nearer our positions; the cannonading now became terrific.

Fires broke out at several points; at the same time the shells falling in the midst of our lines rendered them almost untenable. A number of battalions were obliged to fall back and seek shelter behind the partially demolished walls of St.-Privat.

While this was passing on the front, the Saxons were making further strides towards our right. The 45th Brigade, 9 battalions strong, had emerged from the woods of Auboué and seemed on the point of connecting with

* The forces of the defense comprised:—

The Leroy de Dais Brigade (reduced by losses of the 16th),			3,800 men.
The Sonnay Brigade	"	"	4,000 "
The Colin Brigade (93d Reg't only)	"	"	1,600 "
The Levassor-Sorval Division	"	"	9,200 "
Total			18,600 men.

the troops of the Guard. New masses were, moreover, coming up on the left of these forces.

The 48th Brigade, at the extremity of the turning wing, reached Montois, took possession of the place, and then moved beyond toward the east. Other columns were visible between Malancourt and Montois, and upon the ridges ascending to the latter place from Auboué. They belonged to the 47th (Saxon) Brigade, which had come up in support of the 45th by the ravine northward of Ste.-Marie. The 46th Brigade, the last reserve of the Saxon Corps, was moving in the direction of the 45th. (*See Plate X.*)

Before the arrival of the Péchot Brigade, the 9th Regiment, containing only 26 officers and 2,000 men, was nearly hemmed in by this mass of 29,000 Germans supported by 78 guns. Nevertheless this regiment, under the heroic leadership of its lieutenant-colonel and of General Bisson, who was foremost in inciting his men, made dispositions to present as determined a resistance as possible. Marshal Canrobert, aware of the condition of affairs in this part of the field, and seeing that succor had failed to arrive, realized that the situation was hopeless.

While resolving to defend himself to the last extremity, he sent a line in pencil to the commander-in-chief to inform him that "the attacks of the enemy were redoubling, and that the hostile artillery had dominated his own to such a point that he could no longer hold his positions."

Montois had been grasped (toward 6:30 P. M.) before the Péchot Brigade arrived upon the scene. The 5 companies moved by the 9th Regiment to this side had fallen back under the pressure of 4 hostile battalions and 3 batteries. But presently General Péchot's troops reached the positions assigned them: the 4th Regiment between Roncourt and the forest of Jaumont, along the Pierre-

villiers road; the 9th Chasseur Battalion in Roncourt itself; the 10th, to the south-west of the village with the 9th Regiment.

These forces immediately opened fire upon the enemy's now united masses, whose skirmishers were disposed in an unbroken chain inclosing Roncourt to the north and west. Twenty-two German battalions advanced upon the 7000 men which we had with so much difficulty assembled on this side. Seventy-eight pieces, with 18 additional guns in reserve, supported the enemy's attack.

Our soldiers, under a hail of shells, unflinchingly awaited until the hostile infantry came within range, when they engaged it with the utmost determination.

The action on our right was increasing in intensity.

To the west of St.-Privat we had kept up a continuous fire upon the troops of the Guard. The latter in their straits had asked the assistance of the X. Corps as well as of the XII. The first of these forces thereupon moved forward upon St.-Ail, sending two of its batteries in advance.

The decisive moment was approaching. The 9th Chasseur Battalion opened vehemently against the 48th Brigade, which for a moment was brought to a halt. But soon, realizing our weakness, the enemy resumed his movement to the north and west. The 4th Regiment was then forced to deliver a counter-blow in order to disengage the 9th Battalion. It succeeded in again arresting the Saxons, and then went to the support of the defenders of Roncourt.

Immediately afterwards the artillery opened heavily upon this village; our men stood firm in the midst of bursting shells and falling houses. But this storm of projectiles was but the prelude to a new attack. The enemy's infantry fire increased; ours, on the contrary, began to grow languid. Our severely-tried soldiers

soon perceived that they were outflanked to the north-east. General Péchot dispatched an account of the situation to the Marshal, who at St.-Privat was engaged in maintaining the combat and encouraging his troops. But the latter had neither supports, reserves, nor other means whereby to aid his right. The forces upon this part of the line, decisively turned, were under the necessity of evacuating Roncourt. The Péchot Brigade, leaving in the village a rear-guard sufficiently strong to retard the Saxons, fell back exhausted upon the quarries of Jaumont.

Roncourt was occupied by the adversary at about 7:30. The batteries sent forward by General Bourbaki issued then from the woods of Saulny, and took post upon the edge of the plateau. Their first shots were sufficient to check the enemy.

6TH.—SECOND ATTACK UPON ST.-PRIVAT.

There now remained for our soldiers but a single point of support, which was the very centre of the defense. Their artillery was mute. Since 8 o'clock they had been fighting without hope of relief, in a tempest of musket balls and projectiles that had thinned their ranks, killed Colonel Amadieu of the 75th Regiment, wounded Colonel Daguerre of the 91st, and stricken down many other officers of all grades. But Canrobert was in their midst, and each thought only of making an inflexible resistance.

The Guard and the Saxons are now concentrating all their blows upon the unfortunate village of St.-Privat.

Their skirmishers at once seek to gain ground; but our men, collected behind the walls of inclosures, pour upon them a well-sustained fire which makes them hesitate in their advance. In St.-Privat itself, for some time, everything has been a prey to the flames; roofs are falling, tiling is flying into splinters, walls are

crumbling, projectiles are beating upon the place from various sides, and our losses are increasing. Nevertheless, our soldiers, encouraged by their leaders, remain at their posts, and keep up an effective fire. They are obliged to defend themselves against troops approaching from the south, west, and north; and they find themselves powerless to stem the advance. The hostile skirmishers are only 300 yards away; some of them, even, have reached the inclosure walls. These are immediately fired upon, and various groups of the defenders endeavor to charge them.

The attack has not yet proved completely successful, and night is approaching. The enemy is anxious to give a finishing stroke. Princes Albert and George of Saxony, deciding to still further reinforce their lines by new batteries, bring into action every gun at disposal, and with 84 pieces form an arc of fire around the northwest salient of St.-Privat. A large part of the reserve infantry is called up, and the 20th Division (X. Corps) is ordered forward upon this place.

To bring this desperate and unequal struggle to a close, the Germans had then at last concentrated against St.-Privat 26 batteries and about 100,000 men. We had for its defense only the Levassor-Sorval Division, the Sonnay Brigade, the Leroy de Dais Brigade, the 93d Regiment, and a part of the 9th,—in all about 20,000 men.

The remainder of our units, disorganized by the struggle, had fallen back to the approaches to Jaumont Forest to restore order in their ranks.* Among the troops still in line were numerous companies which early in the action had engaged to the west of St.-Privat, but which under the pressure of events had afterwards been withdrawn to the east of this place.

*These were probably the forces mistaken by the Saxons for strong reserves.

The supporting battalions, already exhausted, decimated, and almost without ammunition, were to bear the entire weight of the last assault.

"The combined fire of the Saxon artillery and 10 Prussian batteries established to the south of the *chaussée*," says the German account, "was not slow in giving testimony to the potency of its action upon the village crowded with French troops. Walls and houses crumbled in rapid succession under the stroke of the shells, and at several points lofty columns of smoke rose above the ruins.

"Affairs had reached the highest pitch of tension during this long engagement at close quarters. The situation was now ripe for a solution, and the German corps commanders had only to give the order for the assault."

The decisive struggle was about to begin. The Saxons engaged to the north and north-west; the Guard advanced by the west and south. Soon the hostile groups reached the first buildings in the north-western and southern portions of the village; but our soldiers contested the advance foot by foot and house by house. Despair gave stimulus to their last efforts. While the main bodies of our regiments, convinced of the hopelessness of further resistance here, commenced their retreat towards the woods of Jaumont, groups of the defenders furiously confronted the Germans surrounding them on all sides, and fought until killed or made prisoner. Detached houses, the church, the eastern front of the village, and finally the cemetery, became the scenes of bloody and obstinate combats. In many places our soldiers, overpowered, refused to surrender, and fought hand to hand with bayonets and butts of guns.

It was nearly night when St.-Privat fell into the hands of the assailants.

The village was now but a ruin; and as for the illustrious chief of the 6th Corps, it was necessary, in spite of

himself, to lead him away from the smoking remains of the place, the possession of which he still wished to dispute with the enemy.

Our divisions were directed upon Woippy, their ranks necessarily somewhat disordered by the great violence of the struggle, but most of the units still under the rein of their leaders. Very little difficulty was experienced in restoring order in the companies.

The retreat was protected by the 94th Regiment; the Péchot Brigade, which had rallied to the east of Roncourt behind the quarries of Jaumont; the foremost troops of the Guard; and especially by the Reserve Artillery that had just come into action near the quarries of Amanvillers, and opened effectively upon the enemy's guns.

On seeing our regiments in movement toward the east, the Saxon cavalry was launched in pursuit; but opposite the quarries of Jaumont it came under a murderous flank fire which forced it back upon Roncourt. This was delivered by General Péchot's troops, now using their last cartridges. The 48th Brigade was immediately moved to this side, and a fresh conflict ensued. It was characterized by a moderately sharp fire, which was prolonged into the night.

The Péchot Brigade in turn reached Woippy, without hindrance, toward midnight.

7TH.—COMMENTS.

Losses.—In both armies the casualties were very great.

On the German side there were *hors de combat*:—

In the 1st Division of the Guard, 4,338 men, or 25.4 per cent. of the entire force.

In the 4th Brigade of the Guard, 2,511 men, or 35.8 per cent.

In the XII. Corps (Saxon), out of three brigades, 2219 men, or 8 per cent.

In the X. Corps, 105 men.
This gives a total of 9,173 men, or 11.5 per cent.
Our losses reached 4,683 men, or 18 per cent.

Effectives.—The strength of the combatants on both sides has already been noted. It is thence seen that we fought at Ste.-Marie in the proportion of 1.5 against 3.3. At Roncourt the 9th Regiment at one point in the struggle, resisted forces twelve times superior in numbers. At St.-Privat, towards the end of the action, we were about one against four. We had fought thus, almost without artillery, for eight hours.

Causes of the Combat.—The combat of St.-Privat was only an episode in the grand contest which took place to the west of Metz between our army, already severely tried by three battles, and eight German corps, five of which were still intact. But in consequence of the configuration of the ground and the dispositions made, it had a countenance of its own and a special character, which permits us to consider it apart from the other features of the battle.

The causes of this action were simple.

On the side of the Germans, a single strategic design was constantly held in view,—to cut our communications with the interior, and prevent our junction with the forces gathered at Châlons.

It was logical, then, for our adversaries to attempt to intercept towards the north the roads we were endeavoring to utilize, trusting for success to their great numerical superiority. Hence the idea of a direct attack by the Prussian Guard, of our *point d' appui* on the right, and the turning movement intrusted to the XII. Corps.

We also had a part in the causes leading to this contest, and in the circumstances characterizing it. The action of our corps commanders in occupying the heights

of Amanvillers, was taken in ignorance of any general design of operations that might have been formed. They had simply been notified the evening before that the army was falling back upon Metz on account of a lack of provisions and ammunition. They had not been directed to take up a defensive position, but merely to fortify themselves in the localities where they happened to be. Lastly, it was due to the personal foresight of Marshal Canrobert that his corps was established at St.-Privat instead of being left at Verneville.

The causes of the action were then, on the one side, the strategic combination of the enemy, and on the other, our passive attitude. We had completely, and, so to speak, voluntarily submitted to the initiative of the assailant.

Results.—The results of the contest on our right were all in favor of the Germans.

The roads to the west and north were intercepted.

One of our corps, beaten and partly disorganized, had been forced to uncover the 4th Corps posted on its left. The latter, toward the end of the battle, had been obliged to refuse a wing in order to protect itself from a flank attack. Finally, our army found itself thrown back under the walls of Metz, and the *morale* of the troops which, under the lash of the most trying experiences, had up to this point remained unshaken, was now dealt a severe blow.

The success of the Germans was due to their superiority in men and guns.

But the defense was most energetic, and the various incidents characterizing its course, better known to-day, present tactical lessons which should not be neglected.

Let us take the initial circumstances of the action—those attending the occupation of Ste.-Marie-aux-Chênes.

A force of 1,500 men, without cavalry or artillery, holding as an advanced-post a village with open approaches, was able to cause a deployment of two strong divisions of the enemy and more than 100 guns.

Further, the defense of this place delayed the attack upon St.-Privat for nearly two hours.

The employment of such posts upon the front of a defensive position is then, with modern arms, one of the normal conditions of a good defense. At Ste.-Marie the resistance of this isolated group was favored by the protection which the ravine to the north offered as a means of retreat. Without this accident of the ground, heavy sacrifices would have been necessary to disengage the defenders of the village, who on their part would have been unable to make so protracted a resistance.

The effect of the action of the 94th Regiment behind the walls of Ste.-Marie demonstrated moreover:—

1st. *The strength of resistance afforded by masonry shelter defended by disciplined and energetically-commanded troops supplied with effective arms.*

2d. *The necessity of preparing for the attack of villages by artillery, and of utilizing all cover presented by the ground during the execution of the attack itself.*

3d. *The possibility of holding out under such conditions against very superior forces.*

4th. *The obligation of always supplementing the defensive strength of these advanced-posts by field-works, one or two batteries, and, in case of need, cavalry and engineer detachments.*

At Roncourt, the incidents of the contest plainly indicated the necessity for improvised works to make up for the weakness of the position.

Lastly, at St.-Privat itself, the power of the infantry arm was manifested by effects so deadly that they have since acquired historical celebrity.

During the combat these effects were unknown to us.

We perceived no result other than the slowness of the assailant's progress. But no more at St.-Privat than at Roncourt or Ste.-Marie, were we acquainted with the real value of our resistance. In the evening each felt that he had done his duty; each perceived that the action had suffered from the failure of proper support; each experienced a sense of humiliation at defeat; each comprehended that the enemy had gained success by virtue of his great superiority in men and his overmatching artillery;—but other impressions escaped us.

In our day, the defensive strength of an intrenched position armed with artillery and offering an advantageous field of fire to the infantry, has been affirmed under the most varied tests of experience.

From a tactical point of view this is a generally acknowledged fact.

But it is especially essential for us to recall that at St.-Privat a vigorous offensive, *en masse*, executed by the three arms against the 4th Brigade and 1st Division of the Prussian Guard after the failure of their first attack, would probably have changed the fate of the day.

Conclusions.—When we think of the effects produced at St.-Privat by an almost completely passive resistance, we are tempted to ask, what, tactically, would have been the results if time and means had permitted the position to be put in a proper state of readiness.

The defensive organization of St.-Ail, and Ste.-Marie seemed to impose itself as a necessity upon the 6th Corps at the outset, in the same way that the preparation of Habonville for resistance became obligatory on the 4th. The occupation of these advanced-posts by a regiment supported by a squadron and a battery (the latter protected by an epaulement), would have compelled the Germans to come to a stand at a point between a mile

and a mile and a half to the west, and to deploy one or two infantry divisions before each of these villages. The execution of the measures necessary to dislodge the forces here would have delayed the attack upon the principal position for at least two or three hours, and exhausted a portion of the assailant's forces.

Upon the extreme right, the question of defense was complicated on account of the natural weakness of the position at Roncourt, and the facility with which the enemy was able to turn it.

The character of the ground in the vicinity, however, pointed out a solution. Montois offered a favorable site for an advanced-post to the north, and it might have been made to play the same part opposite Roncourt that Ste.-Marie fulfilled respecting St.-Privat. But it was at Roncourt itself that the defense was forced to accumulate resources of sufficient strength to confront the dangers of a turning movement. A powerful line of artillery protected by epaulements, gave countenance to the hope of a favorable result; and events proved that by reason of the situation of the 6th Corps, 150 guns were not too many.

It may then be set down that in such a case, that is, for the defense of a position constituting an army's flank, the massing of 200 pieces of artillery at this important point would be clearly justifiable.

It is equally evident that between Roncourt and St.-Privat, and likewise to the south of the latter place, the interests of the defense demanded the construction of numerous epaulements, and the putting in battery, from the very outset of the action, of all available guns.

We are also permitted to conclude that, under the conditions here considered, it would have been sufficient at the beginning of the contest to place a regiment in shelter-trenches before each village; that, in the second place, the infantry might have been advantageously left

in reserve near the borders of the forest of Jaumont; and that, finally, the 6th Corps should have been supported by another corps placed in second line as a general reserve, ready to lend it assistance in case of emergency, or to second its efforts should it assume the offensive.

If these dispositions were not made, their omission sprang from reasons of which history alone has the right to judge. Suffice to recall the deficiencies of our army, not only with respect to the means of making a proper resistance, but especially in regard to those by which victories are attained.

In conclusion, our regiments fought so honorably in this engagement, that they may justly claim the right of being proud of their defense. When an army is defeated after such a resistance, it may reasonably hope to triumph in its turn, on other occasions.

This struggle has then left an indelible impress upon our annals; and it is with a sentiment of legitimate satisfaction, nay, even pride, that the old marshal, Canrobert, and his companions in arms, can say to-day that they were on the 18th of August among the combatants of St.-Privat.

§4.—COMBAT OF VILLEPION, DECEMBER 1, 1870.

1ST.—SITUATION NOVEMBER 30, 1870.

At the end of November 1870, the 1st Army of the Loire, commanded by General d'Aurelle de Paladines, was in cantonment to the north of Orleans. It had taken post here on the day following the battle of Coulmiers, and was engaged in fortifying itself and completing its organization, when the Minister of War and his delegate, having been apprised of the sortie projected by the troops of Paris, resolved to move it forward.

They gave orders to this effect at the council of war

held at Saint-Jean-la-Ruelle, November 30, notwithstanding the contrary advice of Generals d' Aurelle, Chanzy, and Borel.

In consequence of this measure, General Chanzy, commander of the 16th Corps, sent to his generals, toward midnight, an order prescribing the following movements:—

"SAINT-PÉRAVY, December 1, 1870.

"The 16th Corps will move forward to-morrow.

"General Michel will at 10 A. M. assemble the Cavalry Division (except the regiment now at Patay) near the hamlet of Renneville, and will advance as far as the road from Patay to Guillonville, going into bivouac opposite the farm of Perolait. The brigade now at Tournoisis will move in the direction of Patay, etc. (*See Plate XI.*)

* * * * * * * * *

"The Admiral* will assemble the 1st Infantry Division at Lignerolles, and leaving Patay to the left, will take post at Terminiers. * * * * *

"The divisions will, so far as practicable, conform in their order of march to that adopted by the 16th Corps, that is to say, will advance in line of battalion columns at deploying intervals, the infantry moving across country, the artillery, as much as possible, upon the roads.

* * * * * * * * *

"General Michel should reconnoitre the entire region between the high-road from Châteaudun to Janville, and the position which he occupies, paying particular attention to Guillonville, Orgères, Loigny, and Lumeau."

* * * * * * * * *

At the same time General Chanzy addressed a letter to the general-in- chief, in which he said:—

"Reconnaissances pushed forward this morning be-

* Jauréguiberry.

yond Patay have made it manifest that the German troops discovered yesterday are holding their positions with increased numbers from Péronville to Terminiers, their line running through Pruneville, Guillonville, and Gommiers, and that these forces mask others more considerable, which are said to be at Villepion, Loigny, and Orgères.

"In order to be able with certainty to establish myself this evening to the north-east of Patay from Terminiers to Sogny, I have covered the entire movement of the 16th Corps by the 1st Cavalry Division, which before going into bivouac at the places assigned, is to reconnoitre the enemy at Pruneville, Guillonville, and Gommiers, and dislodge him should he show symptoms of wishing to remain there."

On the side of the Germans, the junction between the II. Army, commanded by Prince Frederick Charles, and the detachment under the Grand-Duke of Mecklenburg, had been effected since November 27. The first force, arriving from Metz, had, on the 28th, delivered battle at Beaune-la-Rolande, and on the 30th, was stationed in the vicinity of Pithiviers, watching the roads leading from Montargis and Beaune.

The Grand-Duke, marching from the Loir, had received orders to gain Bazoches-les-Gallerandes; but during the 30th, his troops were still at Toury (22d Infantry Division), Allaines (17th Infantry Division), and Orgères (1st Bavarian Corps).

On this day, collisions between our patrols and those of the enemy apprised General Von der Tann, commander of the I. Bavarian Corps, that he was again in the immediate presence of our masses.

In consequence, he decided to occupy Terminiers on the morning of December 1, by a detachment composed of 2 battalions, 6 squadrons, and 14 guns,—in all about 2,500 men.

He then ordered a strong advanced-guard into the space comprised between Terminiers, Gommiers, and Nonneville, for the purpose of covering himself from any offensive thrust that might be attempted against his right flank from the direction of Cormainville.

Wishing at this point to ascertain the strength and composition of our forces at Patay, he directed the Cuirassier Brigade to concentrate at Terminiers to be able thus to move forward thence upon St.-Péravy.

The 1st Brigade was to support the movement, and to this end, on the morning of December 1, held possession of Terminiers, Faverolles, Gommiers, and the country in the vicinity of these places.

While awaiting information, General Von der Tann concentrated his corps at La Maladerie, in a previously examined position; and in order to properly cover himself, provisionally shifted the 1st Brigade to Nonneville.

These various movements were, on December 1, to lead to an encounter in the vicinity of Terminiers between the troops of the I. Bavarian Corps and those of our 16th Corps.

2ND.—PRELUDE TO THE COMBAT.

Towards the middle of the day, December 1, Von der Tann received word from the 4th Cavalry Division that we had not passed Patay, and that as a result of its reconnaissance this division had returned to its cantonments.

He, in consequence, believed he would be able to do the same; but he left the 1st Brigade in position, pending his issue of new orders. At this time, 1:30 P. M., his forces were distributed as follow :—

The main body at Gommiers.

2 battalions at Faverolles.

1 battalion, 2 guns, and a half-squadron, on the march from Guillonville to Nonneville.

1 company in the wood of Guillard.

1 regiment of cavalry between Faverolles and Gommiers.

The Cuirassier Brigade had moved forward from Faverolles in the direction of Touriette Farm, pushing out detachments towards Songy, Patay, and Villeneuve-Saint-Côme.

Coming to our side, reconnaissances made in the morning developed the fact that the enemy held Guillonville and Gommiers. General Chanzy then ordered Rear-Admiral Jauréguiberry to move upon these places and seize them.

The Admiral assembling his 1st and 2d Brigades (Bourdillon and Deplanque respectively) on both sides of the road leading from Patay to Guillonville, promptly assumed the formation prescribed, that is in two lines of battalion columns at half distance with deploying intervals, and at about 1 P. M. moved forward, preceded by a chain of skirmishers.

Soon the Bavarian scouts notified the commander of the 1st Brigade of the approach of important forces, more especially of a mass of cavalry which seemed to threaten his right.

It was then about 2:30 o'clock. At the same moment the Bavarian general received from his chief the order directing his command to resume its cantonments.

Affairs had suddenly become complicated. The order sent by General Von der Tann no longer corresponded to the real facts of the situation. It was plainly necessary to disregard it and prepare for action.

And yet there was another side to the question. While he supposed his mission was simply of a covering and reconnoitring character, the commander of the 1st Bavarian Brigade in reality found himself unexpectedly assailed by outnumbering forces. He could not, moreover, find shelter for his troops on the level and open

ground occupied. The nature of the *terrain* here permitted us to discover the weakness of his forces, and favored our fire.

By reason of our numerical superiority, he was exposed to the hazards of an enveloping attack, and his remoteness from Orgères prevented the timely receipt of efficient aid. Finally, his troops were not assembled around a strong point of support, and the conditions were in general unfavorable for an energetic defense.

While the Bavarian general, Dietl, was engaged in these reflections, our columns were advancing. It behooved him to take measures to receive our attack, arrest us if possible, and thus gain time.

He made the following disposition of the forces in hand:—

In the interior of Gommiers, hastily organized for defense, 5 companies.

To the west of this village, with 1 battalion in support, 2 batteries.

To the east, 1 battalion and 2 batteries.

To the north, temporarily in reserve, 1 company;

And 1 company on outpost duty at Guillard, to the south.

The remainder of the brigade was assembled, and directed to take station as follows:—

1 battalion at the western exit of the village.

1 battalion at the eastern outlet.

1 battalion in rear at the Chateau of Villepion, a position from which the retreat might be advantageously covered in case of need.

These dispositions had just been completed when, toward 3 P. M., our heads of columns debouched between Muzelles and Guillard Farm.

The Bourdillon Brigade, which was in advance, coming under the fire of the Bavarian batteries, formed front to the right and entered into action; while Gen-

eral Michel's first squadrons were brought to a standstill between Muzelles and Rouvray. On our right, the Deplanque Brigade, menaced by groups of hostile cavalry, had also suspended its march.

The Admiral at once threw forward three divisional batteries, and while the Bourdillon Brigade made head against the forces at Gommiers, carried Guillard Farm with the head of the Deplanque column, which continued its advance upon Guillonville.

The gap produced in our lines between the two brigades, was covered by a battalion of the 39th Marching Regiment, which took post in front of the small wood of Guillard.

The Admiral supported it upon its right by the reserve battery (*canon de* 12) at his disposal, and by the 3d Battalion of *Chasseurs de Marche.*

3RD.—DEVELOPMENT OF THE ACTION.

The horse batteries of the Michel Division came into line in their turn. The Admiral then directed an attack upon the position of Gommiers, the defenders of which had begun to show signs of fatigue.

Soon General Dietl, seeing our movement upon Gommiers assume shape, gave orders to take up a new position in rear at Villepion. The Bavarians were therefore obliged to fall back under fire. Their artillery became silent after receiving a few shots from our *canon de* 12 battery.

The battalion of the 39th Marching Regiment, Captain Sombret, turned the village of Gommiers by the west and carried it.

It was now about half-past three; we occupied Touriette Farm, Gommiers, and Guillonville. The enemy stood at Terminiers, Faverolles, Villepion, Nonneville, and Chauvreux. His artillery reopened fire and the contest continued.

The Admiral then ordered the Deplanque Brigade to wheel to the right, and threaten the enemy's flank. He pushed the Bourdillon Brigade beyond the road from Terminiers to Gommiers, and directed upon Villepion the force that had just taken Gommiers.

General Dietl had sent intelligence of the situation to the corps commander at Orgères; but the latter was not there at the time. The message arrived just as the troops were resuming their cantonments, and the chief-of-staff immediately took upon himself the responsibility of directing the 2nd Brigade (General Von Orff) upon Villevé to the support of the 1st.

The latter, meanwhile, had established itself in a new position at Villepion, its parts distributed as follow:—

1 battalion to the east of Villepion.

1 battalion in the houses on the eastern side.

1 battalion in reserve in the park.

2 batteries eastward of the Chateau.

2 batteries between Nonneville and Villepion.

1 battalion to the west of the park, in support of these batteries. (*See Plate XI.*)

1 battalion in reserve northward of Villepion.

The Cuirassier Brigade had taken station toward Faverolles.

These dispositions had already been effected when the 2nd Brigade reached the scene in the vicinity of Nonneville.

It at once entered into action against the Deplanque Brigade, which was now directing its principal effort to the capture of Chauvrèux Farm.

On the right, General Chanzy appeared upon the field, and ordered the Michel Division to move against the Bavarian left. One brigade being held in position to the left of the Villepion road, the two others composing the division were forthwith pushed forward in the direction of Faverolles, where a part of the 4th Bavarian

Brigade had taken station. The gross of the latter force was at that time marching upon Loigny. This demonstration forced one of the Bavarian batteries to retire.

The Bourdillon Brigade was then able to gain ground in the direction of Faverolles, while the troops that had taken Gommiers, reinforced by a mountain battery, closed in upon Villepion. Our young infantry soldiers here, were only 800 paces from the Bavarian batteries, and our right was gradually outflanking the part of the hostile line opposed to it; while in our other wing, General Deplanque held Chauvreux Farm.

Success was beginning to declare for our side; but night was advancing, and to render the result decisive, it was essential to give spur to our movements. A still further reason for haste resided in the fact that General Von der Tann had just called upon the 3rd Brigade to lend its aid.

4TH.—DECISIVE ATTACK.

The enemy was then in a critical situation. In his right wing a regiment of cavalry had prevented our turning movement; but his 2d Brigade, already sorely taxed, held its ground at Nonneville with difficulty. At Villepion there was the same tension; and our squadrons had begun to outflank the left of his line.

The Admiral then ordered the Deplanque Brigade to turn upon the enemy's right; and taking personal direction of the troops that could be got in hand, he hurled them upon the park of Villepion, the centre of the enemy's resistance. The Sombret Battalion of the 39th Regiment, the 3d *Chasseurs à Pied*, and the 2d Mobile Battalion of the Sarthe, intrusted with this attack, gained possession of the park after a remarkably spirited assault, penetrated to the eastern side, surprised a Bavarian battalion which had been unable to effect a retreat betimes, captured 4 officers and 26 men, and

nearly succeeded in snatching from the foe a battery posted at the entrance of the chateau.

Simultaneously, the 75th Mobiles (*Loir-et-Cher*) supported by a battalion of the 39th Marching Regiment, fell, with bayonets fixed, upon Faverolles, and captured 33 men, while the Deplanque Brigade seized Nonneville.

The success was complete. The enemy was everywhere in full retreat,—the 1st and 4th Brigades and the Cuirassiers upon Loigny; the 2d Brigade upon Orgères, where it was rejoined by the 3d.

On account of fatigue and the darkness, no pursuit was attempted.

Our troops camped upon the battle-field, the Admiral establishing his headquarters at the chateau of Villepion.

The cavalry fell back to the position of its morning bivouac between Muzelles and Pérolait, leaving a brigade to the west of the Guillonville road, to observe the country towards Bazoches-en-Dunois and Conie.

5TH.—RESULTS.

The combat of Villepion had been vigorously carried on. The German losses amounted to 939 killed, wounded, and missing; ours to about 1000. In resuming operations we had thus enlisted a fortunate beginning. This action had the effect of inspiring confidence in the breasts of our young soldiers, and of at once so tempering various battalions of these new levies, that we beheld them fighting with remarkable energy on the following day.

The forces that confronted each other in the contest we are considering can be given only with approximate accuracy. However, according to the report rendered on December 1, we engaged :—

	MEN.	GUNS.	HORSES.
1 division of the 16th Corps	14,220	18	
2 batteries	260	12	
1 division of cavalry	2,826	12	2,696
Total	17,306	42	2,696

The Bavarians had in line:—

	MEN.	GUNS.	HORSES.
Cuirassier Brigade	1,000	6	1,000
1st Brigade (6 battalions), about	4,700	6	
3 batteries	390	18	
2d Brigade (6 battalions), about	4,700	6	
1 regiment of cavalry	450		450
4th Brigade* (6 battalions), about	4,700	6	
Total	15,940	42	1,450

A comparison of the effectives engaged shows, therefore, a slight balance of superiority on our side.

6TH.—COMMENTS.

The combat of Villepion has been denominated an insignificant affair by the Prussian general-staff. It is certain indeed that the forces in line were not large, and that the results of the action were nullified by the German victory on the next day at Loigny. But it is none the less a military event of a special character, and of a scope broad enough to engage attention.

The two forces that came into collision at Villepion were nearly equal in infantry and artillery; but our troops had seen scarcely three months' service, while their adversaries, all experienced soldiers, had been toughened by a four months' campaign, and were elated by victories gained on numerous fields. Again, their artillery had a pronounced superiority as regards both accuracy and range.

*A battery, a half-squadron, and three battalions of this brigade took part in the action; the remainder was in reserve.

Notwithstanding these advantages, the Bavarians were beaten, and the success of our arms clearly affirmed.

What reason shall we assign for this result?

An analysis of the various incidents of the combat will disclose it.

At the beginning of the action we had a striking numerical superiority, which permitted us to successively wrest from the enemy Guillard Farm and Guillonville. At Gommiers, a large fraction of the Bavarian brigade fought without shelter. Hence it may be said that on the one hand, the losses sustained, and on the other, the menace of a turning movement upon the left, joined to our progress in the direction of Guillonville, led to the evacuation of the position.

The organization of the defense of Villepion had to be effected while the forces were fighting in retreat—a condition unfavorable for the restoration of their *morale*, already shaken by the failure of their first efforts.

When the 2d Bavarian Brigade came to the assistance of the 1st, it found the situation already seriously compromised. It was drawn into action against the Deplanque Brigade, which brought to bear a much larger effective. Here also then the Bavarians were laboring under the disadvantage of a decided numerical inferiority. The occupation of Chauvreux Farm and Nonneville by our troops was the consequence.

The second reinforcement, which was sent by the 4th Brigade, likewise found the tide of action setting in stoutly against the Bavarian fighting line. Its influence was counteracted by the advantages that had rewarded the endeavors of our cavalry and artillery.

Finally, when the Admiral threw forward his forces upon Villepion, his attack was in reality as well prepared for as he could wish.

In brief, the successive efforts of the defense had had

the effect of weakening its means of action, while giving a stimulus to those of the offensive. This was the real cause of the final result. The bravery of Admiral Jauréguiberry, his continual presence in the midst of his young troops, the ardor communicated to the latter by officers animated by a desire to conquer, and, lastly, the heavy calibre of the guns of some of our batteries, all contributed to place favorable chances within our reach.

The combat of Villepion is then one of those which most completely demonstrate the fact that veteran and victorious troops are never certain of the morrow; that a skillful tactical employment of the different arms should nearly always give the ascendency; and that numerical superiority in the partial engagements is an almost certain pledge of success.

At all events, one general law, that of the unforeseen, makes itself plainly apparent in the events just described. It sometimes gives rise to anomalous conditions, unexpected incidents, which may be coped with successfully only by a profound knowledge of war.

Night combats belong to this order of facts, and although of somewhat rare occurrence, they are none the less the result of circumstances which it is essential to be able to correctly estimate when they arise.

§ 5.—COMBAT OF PODOL, JUNE 26, 1866.

In this year, the 1st Austrian Corps under Count Clam-Gallis was posted in Bohemia with orders to watch the frontier, extend a hand to the Saxon army, and retire with the latter upon the main Austrian forces.

In consequence, the Count, on June 22, sent to his generals the following instructions:—

"Our principal object should be to rejoin the main army with as little disintegration in our ranks as possible. * * * The forces stationed along the frontier

ought, therefore, in every case, to avoid serious combats with the enemy, contenting themselves with observing him and maintaining contact."

These instructions had the effect of giving the Austrian forces on the frontier the attitude of troops retreating after defeat.

The Army of the Elbe having crossed the frontier, its patrols on June 22d encountered those of the Austrians. The latter, conformably to the orders received, fell back without contesting the advance.

The Prussians profited by this to occupy Gabel.

It was the same upon the front of the I. Army. Gaining the Austrian territory on the 23d, and meeting no resistance, it had successively occupied Reichenberg, Langenbrück, and Eichicht. The 8th Division (Von Horn) arrived at this last point on the 24th. Thence it was able to reach Turnau upon the Iser in one march.

On the next day the I. Army slackened its speed to give the Army of the Elbe time to concentrate at Gabel; and on June 25th the latter was in condition to move upon Münchengrätz in two marches.

At this time, Field-Marshal Benedek hoped still to be able to make an assembly of his forces upon the Iser.

In consequence, he gave orders on the 28th for the 1st and Saxon Corps to concentrate between Münchengrätz and Jung-Bünzlau, and "to oppose themselves to all attacks coming from the direction of Gabel or Reichenberg. They must act according to circumstances, and be supported by reinforcements in case of necessity, or retire in presence of superior forces."

This order did not reach Prince Albert of Saxony until two days after its dispatch. It was no longer practicable to carry it into effect; it was moreover lacking in precision.

Besides this, as these forces upon the Iser were confronted by hostile bodies of considerable size, the pre-

vious instructions were adhered to, and the general movement in retreat continued; contact with the enemy was, however, still kept up.

The 1st Division of Light Cavalry was then given orders to fall back in case of attack.

The Poschacher Brigade of the 1st Corps, at Turnau, had instructions to support the cavalry, and, upon retiring, to destroy the bridges at Podol and Laukow.

On June 26 the 1st Cavalry Division, attacked at Sichrow by the advanced-guard of the 8th Prussian Infantry Division, moved upon Podol, crossed the Iser, and went into bivouac at Brezina and Hoschowitz. (*See Plate XII.*)

A battalion of the Poschacher Brigade, which had proceeded to Podol in support of this cavalry, remained in the locality for the protection of this point. Three companies occupied Podol and Swigan, and three others Laukow, with orders, in case of serious attack, to repass the Iser and burn the bridges.

Turnau was abandoned, and its two bridges destroyed; while two companies of Rifles, moved to Zdiar, were intrusted with the duty of watching the road leading into this section.

The relinquishment of Turnau resulted in uncovering the line of the Iser toward the north; but this fact did not appear to agitate the leaders of the Austrian forces, probably on account of the plans formed for a retreat upon the Elbe.

Unfortunately, at 2 P. M. of this day, Prince Albert of Saxony received, at Münchengrätz, a telegraphic order which modified previous instructions, and gave injunctions * * * "to hold Münchengrätz and Turnau at any cost."

The necessity then arose of retaking Turnau. The commander of the Austrian troops therefore resolved to march upon Sichrow and Liebenau, points situated be-

yond Turnau to the north. He hoped to still have before him only the heads of column of the 7th and 8th Prussian Divisions, and to overwhelm these forces before others came up.

In this view, the Poschacher Brigade at 8:30 P. M. received orders to at once occupy the heights of Swigan, in front of Podol, so as to insure the remainder of the 1st Corps a safe debouch on the next day. This brigade set out in two columns,—the left (2 battalions and a battery) marching upon Laukow; the right (2 battalions and 7 companies) upon Swigan *viâ* Podol.

In the meantime, the 8th Prussian Division reached Preper, 2½ miles from Podol. A reconnaissance was pushed in the direction of the latter point, and immediately afterwards a Prussian battalion received orders to seize the passages of the river here. Two companies set out in advance. They arrived at 7:30 P. M., and seeing the principal bridge under the guardianship of a weak Austrian force, attacked the latter vigorously, and drove it back into the village. The companies posted at Swigan retired in turn.

Soon the arrival of the other two Prussian companies raised the assailant forces to a thousand men.

The Austrian position seemed compromised, when the right column of the Poschacher Brigade lent the engaged troops efficient support.

Notwithstanding night had come on, the combat was vigorously renewed, the village retaken, and the enemy thrown back upon the right bank. Pursuing along the Turnau road to Prissowitz, the Austrians came upon well-posted supporting troops, and were brought to a stand.

The strife re-commenced then with fresh ardor; but General Poschacher and Count Clam, both of whom had just arrived, judging further efforts useless, by reason of the lateness of the hour, ordered a cessation of the fire.

The Austrians returned to Podol.

In the Prussian ranks, estimates of the situation were quite different.

General Von Bose, commander of the 15th Prussian Infantry Brigade, bivouacked at Preper, had towards 10 P. M. noticed that the firing in the direction of Podol was redoubling in intensity and drawing nearer.

Without waiting for orders, he got in hand two battalions and hastened toward the point of attack, leaving helmets and knapsacks at the place of bivouac.

On the way, he met the returning detachments, gathered from them information concerning the state of affairs, and decided that Podol being an important point of passage, should be seized as soon as possible. He consequently resolved to immediately renew the attack, regardless of the hour.

When near the village, he encountered an advancing Austrian battalion, the bright moonlight permitting objects to be clearly distinguished. One of the Prussian battalions kneeling, received the enemy with a volley from four ranks. Under this fire, delivered at a distance of 30 paces, the Austrian column came to a halt, and then fell back precipitately, leaving a large number of dead upon the field. The Prussians hurried forward in pursuit, and presently reached the village.

Here the Austrians made a counter-thrust, which was brought to naught by the effects of the Prussian fire.

Soon the greater part of Podol fell into the hands of the assailant.

A lively fusillade then began against the force defending the bridges. At the proper moment, General Von Bose, placing himself at the head of the first column, led it upon one of these, which he captured, and with three companies took up position on the other side. At a critical point of this attack he had set a personal example by seizing a musket from the hands of a soldier and pushing forward.

From this moment all efforts of the Austrians to dislodge the enemy proved ineffectual, notwithstanding their leader had brought up reinforcements from his other brigades.

The action ended at about 1 A. M. The Prussians remained masters of the *débouché* at Podol, but there was an immediate necessity of finding means to retain the advantage.

With this in view, General Von Bose at once rode back to divisional headquarters at Preper, made request for a battery, and taking no account of the fatigue caused by the march of the previous day and the night combat, without pause conducted it to Podol, which was reached before daybreak.

During his absence, in expectation of a general attack, the troops pushed beyond the bridge had fallen back to the village.

Count Clam, seeing that in the narrow space occupied by the combatants, his soldiers were taken at a great disadvantage pitted against troops armed with the breech-loading rifle, at 1:30 A. M. ordered a retreat.

The losses of the Austrians were 33 officers and 1,015 men; of the Prussians, 12 officers and 118 men.

Comments.—This night combat, although not of great importance when viewed simply with regard to the number of effectives engaged, was yet of considerable significance when surveyed in the light of the results.

The occupation of Podol opened indeed to the Prussian army the shortest line to Gitschin; it had the effect also of completing the turning by the north of the line of the Iser, and constituted a menace to the communications of the Austro-Saxons with the army cantoned upon the Elbe.

This success was due:—

1st.—*To the ardor and activity of the Prussian generals*

and other officers, who having constantly present in the mind the point to be attained by a particular operation, had acquired the habit of marching upon it without loss of an instant, impelled by a resolute will, and a fixed determination to immediately avail themselves of every advantage of time and place.

It is seen that under all circumstances the Prussians acted on the principles that an attack once decided upon must be renewed until success is assured; and that in war neither the hour nor the state of the weather should be permitted to place a rein upon the enthusiasm of assailing troops.

In their view, every advantageous post must be occupied at the earliest possible moment, even at night. But when this post controls a *débouché*, and it is a question of an offensive movement, it becomes a duty to seize it, even without orders.

Moreover, every attack being preceded by a reconnaissance, it is possible to examine the ground, and to so dispose a force as to put it in a condition of superiority with respect to the adversary.

It is to be observed that in order to attain this result, the subordinate leaders should be so practiced during peace that they may discern the decisive features of the ground, and acquire the initiative requisite to seize them without the necessity of striking a blow.

The resolution, audacity, and energy of General Von Bose, in the combat of Podol, evidently enlisted signal chances of success in his favor.

2nd.—*To the superiority of the needle-gun.*

This arm has been the great argument used in determining the various questions presented by the campaign of 1866; and without wishing to detract in any degree from the merits of the strategical combinations or the tactical methods employed, we may say that in the

combats, especially in the one we are considering, it played a preponderating part.

A comparison of the losses sustained will not permit a doubt to be entertained on this score, although the Prussians may have questioned the effects of their weapon, and the Austrians may not have given these effects due prominence.

At Podol, the proportion of killed and wounded on the two sides was as 1 to 8.

In the other rencontres, this proportion was always from 3 to 8 times greater on the side of the Austrians.

At Trautenau, where they completely defeated the adversary, the balance of loss was yet against them.

This advantage in armament has since been compared to that which would have been given the Prussians by the employment of a force three times as large as their actual effective.

3d.—*To the tactical methods of the two armies.*

While the Prussians were fighting in dispersed order, the Austrians, struck by the impetuosity of our assaults in 1859, had adopted the plan of attacking with the bayonet (*offensivstoss*), executing the movement by platoons closed in mass,—a formation which rendered the fire of their adversaries still more destructive.

Again, the annual manœuvres of the Prussians had bred throughout all degrees of the hierarchy, a free habit of exercising the initiative. They first of all made an effort *en masse* to seize upon the natural cover afforded by the ground. They knew then how to utilize it to its fullest extent, making it serve as a stepping-stone to a new offensive movement, which however was generally not attempted until the enemy began to droop under the fire of artillery and infantry.

Finally, it is permissible to believe that with respect to firing practice in the Austrian army, much was left to be desired, since in a four hours' action fought in in-

trenched or sheltered positions, a force of more than three battalions, counting an effective of about 2,800 men, was able to inflict upon the enemy a loss of only 130 killed and wounded.

4th.—*To lack of precision in the direction of affairs in the Austrian army;* to the determination to which this State had come to remain on the defensive; and to indecision, which led to a tardy drawing up and dispatch of orders, abated the ardor of the troops, fatigued them unnecessarily, occasioned misunderstandings, and favored to a great degree the energy of the adversary.

The first instructions issued by Count Clam, although justified by the orders of the generalissimo, clearly showed, even at this stage, the inferiority of a method of passive defense when contrasted with the offensive.

The effect of obliging the Austrian forces to retire without giving battle, was to create in the minds of the soldiers a sentiment of weakness, and to condemn them to the state, in point of *morale*, of troops that had suffered a repulse. The Prussians, on the contrary, were filled with a sense of superiority, and their moral force acquired a ten-fold vigor. When, despite the orders given, the Austrians were obliged to accept battle, the gravity of the situation increased, for then their task was not to make an effort to defeat the enemy, but to endeavor to withdraw their forces after having checked him. Under these conditions, the victory-assuring enthusiasm of attack could not exist. From a tactical point of view, it was a faulty and regrettable combination.

We have seen that in moving upon Podol, the commander of the 1st Austrian Corps hoped to overwhelm the enemy's heads of columns, assumed to be weak, before the arrival of their supports.

A thorough acquaintance with the organization and tactics of the Prussian army would no doubt have led

him to a different decision. From the moment the Austrians came into contact with their adversaries, they should indeed have known that the advance forces in question were strong enough to sustain an action; that the main bodies followed in preparatory combat formation, that is to say, not farther than a kilometre [five-eighths of a mile] in rear; that consequently, in an hour, they would be confronted by the troops seconding these heads of column, thus having matched against them two divisions in supporting distance of each other, or forces equivalent to an entire army corps.

In was necessary, then, in fulfillment of the instructions received from Feldzeugmeister Benedek, to concentrate both the 1st and the Saxon Corps in proximity to the anticipated points of attack.

In reality, the 7th and 8th Divisions on the march were each distributed into three groups—advanced-guard, centre, and reserve.

In the latter division, the advanced-guard contained:—

2 battalions,
1 squadron,
1 battery.

The centre:—

7 battalions,
3 squadrons,
2 batteries.

The reserve:—

1 battalion,
1 battery,
1 company of pioneers.

A total of about 12,000 men and 24 guns.

Finally, on June 26th, these two divisions were only 1⅞ miles asunder.

Such, in general, were the causes of Prussian success in 1866.

But they do not stand alone. There were others aris-

ing from the character of the organization of the army, military education, and tactical instruction. Taken together, these constitute an ensemble of qualifications which assured to the Prussian troops a real superiority. Unfortunately for us, these advantages arose to still clearer view in 1870.

All our combats of this epoch were not, however, void of distinction. That of St.-Privat has already shown us an unequal contest in which our soldiers, notwithstanding their final defeat, acquired a share of renown not unworthy to be coupled with our former glories.

At Villepion we beheld our inexperienced levies advancing, thanks to the energy and skill of their leaders, to the attack of veteran troops exalted by the prestige of twenty victories.

Other engagements still might be cited, from which we derived honor or advantage. But, in order to put to greatest profit the teachings of this fatal campaign, it is principally to our defeats that we should turn our scrutiny.

Let us then terminate this study by the recital of the events of one of the combats of this period in which our attempts proved ineffectual. It will leave us at least this consolation, that even in the midst of our reverses we never forfeited the right of being proud of our efforts. It will give us this conviction, that the remembrance of a painful past is powerless to exclude from our hearts a legitimate hope of favorable results in battles yet to come.

§ 6.—COMBAT OF VILLERS-BRETONNEUX, NOVEMBER 27, 1870.

On this date, General Farre, commander-in-chief of the forces assembled in the North, was obliged, near Amiens, to face the I. German Army in a battle which comprehended three distinct actions — Villers-Bre-

tonneux, Boves, and Dury. Let us confine ourselves to the first of these combats.

I.—Situation.

1st.—French Army.—On November 27th, five days before its first engagements, the Army of the North had lost its commander-in-chief, General Bourbaki, through his assignment to duty elsewhere. General Faidherbe, at the time in Africa, was appointed his successor. The immediate responsibility devolved then upon General Farre, chief of general-staff, who thus by force of events became temporary commander-in-chief.

Our total forces here at this period consisted of but three brigades, commanded by General Lecointe and Colonels Derroja and Du Bessol, all of whom had escaped from Metz. News had just been received of the march of the Germans upon Amiens. It became necessary to prepare for the defense of this place, and to this end to assemble our brigades upon the Somme. Orders were issued on November 21, and on the following day the troops were put in march.

On the 24th, our small operating corps, scarcely yet organized, was concentrated in and around Amiens.

The 1st Brigade (Lecointe) was in the town itself.

The 2d Brigade (Derroja), at Camon and Bores.

The 3d Brigade (Du Bessol), at Corbie, Villers-Bretonneux, Cachy, and Gentelles.

The 1st and 3d Brigades, which alone took part in the defense of the plateau of Villers-Bretonneux, had the following composition:—

1st Brigade (General Lecointe).

2d Chasseur Marching Battalion, Commandant Giovaninelli.

Line Marching Regiment (Lieut.-Colonel De Gislain), made up of:—

2d Battalion of the 75th Regiment (Commandant Aynès).

1st Battalion of the 65th Regiment (Commandant Enduran).

1st Battalion of the 91st Regiment (Commandant Cottin).

46th Mobile Regiment, composed of the 1st, 2d, and 3d Battalions of Mobiles of the North (Lieut.-Colonel De Fierville).

Artillery, 2 batteries (Commandant Pigouche).

3d Brigade (Colonel Dufaur Du Bessol).

20th Chasseur Marching Battalion (Commandant Hecquet).

1st Battallion of the 43d Regiment (Commandant Roslin).

1st Battalion of Marines (Commandant De la Broue).

The 48th Mobile Regiment, composed of the 7th, 8th, and 9th Battalions of Mobiles of the North.

Artillery: 2 batteries (*canon de* 4*), temporarily reinforced by two others (*canon de* 8 and *canon de* 12).

In a word, a normal brigade formation of 7 battalions was adopted, one of them being a chasseur marching battalion, 3 line battalions constituting a marching regiment, and 3 battalions of Mobiles composing a mobile regiment. Two batteries (*canon de* 4 and *canon de* 12) completed these brigades.

Each company of infantry had an effective of 3 officers and 150 men.

A battalion was composed of 5 companies, with a strength of 17 officers and 750 men.

* In the designations *canon de* 4, *canon de* 8, etc., the figures originally expressed the weight of the round shot in pounds. Later, they were found to correspond, approximately, to the weight of the shell in kilograms, which permitted the old denominations to be retained.—TR.

Each regiment, formed of 3 battalions, counted a maximum effective of 55 officers and 2250 men.

Finally, each brigade contained 5,400 soldiers of all grades, with 12 guns.

These forces were made up of recruits who had not been with the colors longer than since the end of September. The most experienced had seen but two months' service, while the newest arrivals had been only a fortnight in the ranks.

Officers of the regular army, the most of whom had escaped from Metz and Sedan, commanded them.

In moving to the Somme, General Farre had no other aim than to cover Amiens. Forming as it did the principal junction point of the highways and railroads connecting Northern and Western France, it did not seem advisable to abandon this important city to the enemy.

Public opinion demanded its defense. It appeared necessary, then, to resolve upon the adoption of this measure, despite the insufficiency of the means at disposal.

But how was Amiens to be protected? What was the best combination to adopt? Such was the problem confronting General Farre.

With a regular and well-trained army, the question was simple. The proper plan would have been to march against the principal hostile force, and attack it, while seeking to cut its communications. Now the I. German Army, which, without encountering any obstacle, had just made a comparatively long strategic march from the Moselle to the Oise, held as direct lines of communication the roads leading upon its supports, that is to say, in the direction of the army investing Paris, and especially toward the Army of the Meuse. A menace therefore on this side was a matter of extreme gravity.

But in the actual state of affairs, the course to be pursued was quite different. Our small Army of the North,

materially and morally inferior to the enemy, could not think of an enterprise of this kind. It must content itself with intercepting the roads followed by its adversary, and with selecting a good defensive position upon their approaches, opposing to him there, within the limit of its means, the most obstinate resistance possible; not neglecting, at the same time, to assure its own rear. This was the rôle upon which it determined.

One matter still remained,—the choice of a position.

The Germans followed the roads from Péronne, Montdidier, and Breteuil. They were obliged to traverse a country cut up by marshy valleys.

Extended plateaus, with abrupt slopes, and generally of open ground, but here and there flanked by dense copses, separated these valleys. It was necessary to occupy one of these elevated stretches. That spreading southward from Amiens, between the Avre and the Celle, appeared the most clearly pointed out; and the municipality had caused to be constructed here a line of intrenchments well calculated to afford good shelter. But to concentrate our forces in this locality was to expose them to the danger of being turned, invested, and overwhelmed by a disaster similar to those of which the beginning of the war had furnished too many sad examples.

It was preferable therefore to take station along the plateau of Villers-Bretonneux, to the south-east of Amiens. This position presented the advantage of covering the different lines of retreat conducting to our places of the North. It was separated from the enemy's masses by a small valley, that of the Luce, which extended from east to west at a distance of a little over three miles from Villers-Bretonneux. Bounding this valley on the north were wide ridges, with gently sloping flanks, clad in part by the woods of Morgemont, Hangard, Domart, Fleye, and Gentelles. (*See Plate XII. bis.*)

Along the center of the valley at the points of passage of the Luce, scarcely a mile and a quarter apart, and hidden among the trees, were numerous villages. Those of Cachy, Gentelles, Marcelcave, and Villers-Bretonneux, were situated upon the plateau itself, and furnished excellent shelter for the defense of the approaches.

Westward of Villers-Bretonneux was a wood three miles in length, its different parts designated by the names Aquenne, Blangy, and L'Abbé.

The valleys of the Avre and the Somme bounded this plateau on the west, north, and east.

The Du Bessol Brigade held this position from the 24th to the 26th of November, intercepting thus the roads from Roye and Péronne, and covering with its left wing the important point of passage of the Somme at Corbie. Its right flank was covered from the side of the Avre by the Derroja Brigade.

Vigorously conducted infantry reconnaissances had been made along the Roye road on November 23 and 24.

These had led to the engagements of Le Quesnel and Mézières.

Colonel Du Bessol commanded in person in the latter action, at the head of 4 battalions, a battery, and a few dragoons, and succeeded in driving back as far as Bouchoir a German advanced-guard composed of 4 squadrons of Uhlans, a company of infantry, and 2 guns. This success, inconsiderable though it was, had the effect of inspiring confidence in the breasts of our young soldiers, and in a certain measure of strengthening the pulse of their *morale*.

2d.—German Army.—After the fall of Metz, the I. German Army, under orders of General Manteuffel, had, on the 7th of November, quitted the banks of the Moselle.

On the 21st it occupied the line of the Oise, upon a front of scarcely 13½ miles, from Noyon to Compiègne.

The 3d Cavalry Division, assigned to the duty of keeping it informed, explored the country as far as the vicinity of Roye, Montdidier, and Ham. It thus covered a space of 15½ miles in front and 12½ upon the right flank.

Reports sent in by the cavalry had apprised General Manteuffel that we held no forces upon the upper Somme, but that numerous armed groups, estimated at a total strength of 15,000 men, were assembled in the neighborhood of Amiens. His mind was immediately made up. He resolved to move against the adversary of whose presence he had just been notified.

His army, weakened by the detachments left at Metz and before our places in the East, comprised :—

The I. Corps (Von Betheim), less its 4th Brigade engaged in besieging La Fère;

The VIII. Corps (Von Göben);

And the 3d Cavalry Division (Von Gröben).

These forces were composed of veteran troops which had taken part in the siege of Metz, and fought against the Army of the Rhine in the sanguinary battles of August and September.

General Manteuffel prescribed :—

To the 3d Cavalry Division, to reconnoitre the proposed line of march in the direction of Ham, and to be in position at Moreuil-sur-l'Avre on November 25;

To the I. Corps, to be between Roye and Noyon on the same date;

And to the VIII., to occupy Montdidier.

This order was punctually executed. On the 26th, the I. Corps, which on the next day was to find itself engaged alone at Villers-Bretonneux, stood at Le Quesnel and Bouchoir. Its left was covered by the VIII. Corps, and its right and front protected by the Cavalry Division, which had pushed reconnaissances as far as the Luce, and the bridges of the Somme at Braye and Corbie.

The headquarters of this division were at Rozières, upon the railroad from Amiens to Péronne.

II.—Preliminaries to the Combat.

1ST.—OFFENSIVE PROJECTS OF THE GERMANS.

In the engagements of the 23d and 24th, General Manteuffel had observed that our troops each evening moved to new positions in rear. He concluded from this, that we were not in condition to resist, still less to pass to the offensive; and that our design was to fall back before his columns as far as Amiens, and to then make an attempt at defense under the protection of the walls of this place. He therefore thought it useless to concentrate his forces. It seemed to him proper to continue his march, that he might be certain of having all his forces in hand on the 28th, and be in readiness to deliver battle on this day.

This resolution, conformable to the logic of facts as they appeared to him, was, however, out of touch with the distribution of our troops. The information furnished by the German cavalry upon our positions, possibly involved several gaps. However this may be, the combination adopted by our adversaries was the result of an erroneous estimate of the circumstances of the situation, and should have thrown into our hands, on the day of combat, a favorable chance of success. Unfortunately we were not able to turn the advantage to account.

This being the state of affairs, General Manteuffel contented himself with making the following dispositions for the 27th. The I. Corps to move the first echelon of its main body upon the Luce, and the 3d Cavalry Division to hold itself at the disposal of General Von Bentheim. The left flank was to be covered by the VIII. Corps, which had orders to advance on the same day to the position Moreuil-Essertaux.

Pursuant to the instructions of the general-in-chief, the commander of the I. Corps prescribed to the 3d Cavalry Division, on the afternoon of the 26th, to direct its patrols upon Amiens ; and to the advanced-guard, to occupy the plateau extending from Gentelles to Marcelcave, for the purpose of affording security to the main body, which was to be cantoned in the villages situated on the Luce.

This corps was then to continue its offensive march. A combat, should one take place, could be only a chance engagement.

The order of General Von Bentheim placed the advanced-guard of the I. Corps in a peculiar tactical situation. It was necessary for it to pass the defiles in its front on the next day, and occupy the *terrain* beyond. In 1870 as in 1866, our adversaries, well acquainted with this species of operations, never hesitated in the line of conduct to be pursued, immediately making the dispositions that seemed to respond to the exigencies of the situation, even without orders. It was thus with the I. German Corps at the time we are considering.

The advanced-guard, formed of the 3d Infantry Brigade reinforced by 3 divisional batteries, marched in the following order :—

Head of the advanced-guard: 2 battalions, 2 squadrons, 1 battery.

Gross of the advanced-guard: 4 battalions, 1 squadron, 2 batteries, and 1 company of pioneers.

On the 26th, upon the receipt of General Von Bentheim's instructions, the head of the advanced-guard, which had at first stopped at Le Quesnel, pushed on as far as the Luce, and occupied with two companies the bridges of Domart and Demuin, upon the roads from Roye to Amiens and from Moreuil to Corbie, respectively.

At about 8 A. M. on November 27, this head of ad-

vanced-guard was assembled between Hourges and Hangard. Meanwhile the squadrons accompanying it, and the patrols of the 3d Cavalry Division, reconnoitred the plateau of Villers-Bretonneux. The main body of the advanced-guard was put in motion toward the Luce, and at a little distance behind came the echelons of the gross of the corps, in the following formation:—

1st echelon.

3 battalions;
2 squadrons;
2 batteries;
Corps artillery (6 batteries);
3 companies of pioneers.

2d echelon.

3 battalions;
1 battery.

The remainder of the 1st Infantry Division advanced as far as Roye.

The German cavalry had been received by a fire of musketry in the woods of Hangard and Domart and in the approaches to Cachy and Gentelles. General Von Pritzelwitz, commanding the 3d Brigade, informed of this fact, awaited at Hourges the debouch of the main body of the advanced-guard upon the height to the south of Hangard. Upon its arrival, a little before 10 o'clock, he divided his forces into three columns.

That of the left, with a strength of a squadron, six companies, and a battery, had orders to occupy the woods of Domart, then the height to the west, and afterwards to move upon Gentelles.

That of the centre, composed of a battalion, a squadron, and a battery, was to seize the woods of Hangard and march upon Cachy.

The right column had at its head two companies and a squadron, followed immediately by a regiment of infantry and a battery. Its objective was Villers-Bretonneux.

At 10 o'clock the movement commenced. Its consequence was to be an offensive rencounter for the Germans, and for us, on the contrary, a pre-arranged defensive action.

2ND.—DEFENSIVE DISPOSITIONS.

While these events were occurring upon the left bank of the Luce, Colonel Du Bessol had, very early in the morning, received warning of the approach of strong hostile columns. In expectation of an attack, he had several days before prepared a shelter-trench in the form of a double redan upon the road from Villers-Bretonneux to Demuin at its point of intersection with the road from Marcelcave to Cachy. He had also caused a trench to be cut along the railway embankment on both sides of the road from Ignaucourt to Fouilloy. On the morning of the 27th he requested reinforcements from General Farre, who forwarded 3 battalions of the Lecointe Brigade; namely, one of the 65th Regiment, one of the 75th, and the 20th Chasseur Marching Battalion.

Colonel Du Bessol then made the following disposition of his troops.

The defense of Gentelles was intrusted to the 20th Chasseur Battalion; that of Cachy, to the 1st Battalion of the 43d Regiment. Each of these established 3 companies in first line, from 300 to 400 yards to the south of the villages, and 2 companies in reserve in the houses.*

To the left of the 43d Regiment, upon the road from Cachy to Marcelcave, were installed 2 companies of the 75th, in first line, supported by a company placed in reserve in the hollow separating the woods of Aquenne from Villers-Bretonneux.

* Details upon the positions occupied by our troops have been given by Chief-of-Battalion Courson de la Villeneuve, who ascertained and noted them upon the spot, and who in 1870 was orderly officer to Colonel Du Bessol.

The last two companies of the 75th Regiment were posted on the extreme left of the line of battle to the north-east of Villers-Bretonneux, toward Hamel.

The battallion of the 65th Regiment prolonged the line to the left of the 75th, with 2 companies in front and 3 in rear. Then came 3 companies of the 48th Mobile Regiment, two in first line, ensconced in the trenches to the south of Villers-Bretonneux, and one in reserve. Two companies of the same battalion had been directed toward the left wing, to take station on the right of the companies of the 75th. The two remaining battalions of the 48th Mobiles were massed, sheltered by sloping ground, at the entrance to Villers-Bretonneux, on both sides of the road to Demuin.

The space between this road and the railway was occupied by 4 companies of the 2d Chasseur Battalion. The fifth company stood in reserve in rear.

Finally, beyond the railroad, to the right of the two companies of Mobiles, was located the battalion of Marines. One of its companies had been posted along the embankment, on the south side of the railroad, in touch with a company of the 2d Chasseur Battalion.

Our 2 *canon de 4* batteries had taken position to the south of Villers-Bretonneux, near the road from Demuin. The *canon de 8* and *canon de 12* batteries were to the east of the village near the mill, a company of engineers serving as a support.

Our weak forces were obliged, for the protection of their line of retreat, to cover the ground even to the approaches to Corbie. They extended thus over a space of five miles.

The woods of Hangard, Domart, and Morgemont were occupied by small detachments furnished by the neighboring battalions.

3RD.—FIRST ENGAGEMENTS.

By 10:30 A. M. the left column of the Prussian advanced-guard had reached the wood of Domart. Two companies penetrated it, while the squadron advanced upon the road to Amiens. Four companies, at the same time, gained ground to the north-west. Our small detachments at Domart Wood, seeing themselves outflanked, fell back upon Gentelles; and immediately afterwards a hostile battery unlimbered to the west of the wood, and opened fire upon the houses of the village.

The 20th Chasseur Battalion, alone, and unsupported by artillery, had to face a charge made by superior forces. It resisted as best it could; but the soldiers, fearing a turning movement to the west, were soon out of condition to prolong the contest, and retired toward Abbé Wood. The enemy then seized Gentelles, and posted two companies on its eastern edge. The rest of his infantry was massed to the west of the village, except one company, which was directed upon Hangard Wood in order to connect with the central column for a combined attack upon Cachy. The battery of the left column had already opened against this village.

In the meantime, the hostile central column had entered Hangard Wood, and without difficulty taken possession of its north-west border. Seeing then the contest in progress in the direction of Gentelles, its chief had detached a battery and a company with orders to move upon the small wood of Fleye, northward of Domart Wood.

Commandant Roslin of the 43d, in view of these seeming preparations for a concentric attack upon Cachy, resolved to defend his position by passing to the offensive. Leading forward against the wood of Fleye the three companies deployed to the south of the vil-

lage, he obliged the hostile groups to come to a standstill, and meet his murderous assault. The character of the action here caused the dispatch to the scene of the three German companies remaining available at Gentelles. Before these supports, Commandant Roslin, now not farther than 350 paces from the German skirmishers, was forced to call a halt. His numerical inferiority had become very sensible. Exposed to the fire of five companies and a battery, he was compelled to retire. The greater part of his officers were *hors de combat.* A few moments afterwards he himself fell, mortally wounded. His soldiers drew back upon Cachy and prepared for an energetic defense of this village. The offensive on the part of the battalion of the 43rd was not however without advantageous results. It put a term to the advance of the enemy. From this time the combat hereabouts was continued in an indecisive way until 3 P. M. The attack upon Cachy was renewed, but not pushed with vigor; and our men succeeded in holding their position.

Viewing the action from the side of the Germans, the principal blows had been delivered from their right, and as a result the forces of their left wing, abandoned to themselves, dared not renew an attempt in which there was no certainty of being supported.

III.—Development of the Action.

The two German companies at the head of the right column were first halted between the woods of Hangard and Morgemont, to give the regiment in their wake time to gain ground toward the right. They then moved into the eastern part of the former wood, intending upon their debouch to dash forward against our positions. The companies of the 75th and 65th Regiments and the 48th Mobiles, apprised of this movement,

received them with such a vehement fire that they were cast back to their point of cover.

A battalion of the 44th German Infantry arrived at the same moment upon the northern border of Morgemont Wood. But the intensity of our fire prevented it also from making an exit.

Furthermore, our batteries had, toward 11 o'clock, opened upon the German battery that had come into position at this point. The action soon became extremely spirited. The enemy, considering that a frontal attack augured ill for a successful finish to the combat, directed two of his battalions upon Marcelcave and the railroad embankment, in the hope of outflanking our left. The 2d Chasseur Marching Battalion, and the companies posted in the trenches here, were soon engaged in their turn. The contest now became general.

In inclining to the right, the enemy had linked to his 3d Cavalry Division, at the time advancing to the north of the Péronne railroad with the battalion of Rifles and the battery attached to it. Before this array of forces, a company of Mobiles stationed in the eastern portion of the line of shelter-trenches along the railroad, abandoned its position. The German skirmishers straightway occupied it, toward 1 o'clock.

But Colonel Du Bessol, putting himself at the head of several groups of the 2d Chasseur Battalion and the battalion of Marines, succeeded in recapturing the post.

Judging that our fire mastered the enemy's, the Colonel, in the train of this movement, gave orders to a battalion of the 66th Regiment to pass to the assault, supporting it by the companies of the 75th Regiment and the 48th Mobiles, which were to the south of Villers. Under his valorous impulse our men pushed forward against the wood, being replaced in their position by the reserve battalions of the Mobiles just mentioned. The enemy, who had made his principal effort from his right,

had now only weak units remaining on this side. These fell back as far as the Luce, followed by our skirmishers, who, toward 2 o'clock, were for an instant warranted in thinking of success. Unfortunately for them, the dispositions adopted by the Germans were not slow in changing the face of the situation.

At the moment when the enemy was giving way before the pressure of our attacks northward of Demuin, the first echelon of the main body of the I. Corps arrived to the south of this village. The Crown Prince's regiment (1st Regiment of Grenadiers of East Prussia), marching at the head of the column, was forthwith thrown forward against our recruits. The latter, overpowered by the force of numbers, and by this time fatigued, were obliged to draw back. Still fighting, they retired to their first positions, while the assailant again, with fresh masses, lined the northern skirts of the [Hangard] wood. To the east of that of Morgemont, four of his batteries, two of them from the Corps Artillery, now came into line, followed presently by four others that unlimbered on their right. The enemy had then on this side a strong line of guns, supported to the north of Marcelcave by a horse battery. Under the blows of these 60 pieces, our two batteries (*canon de* 4) already sorely tried, were obliged to cease firing. The enemy was then able to cover our positions with his projectiles, and our young soldiers were forced to continue the action under an artillery fire which would have shaken the fiber of more experienced troops. At 3:30 P. M. our situation, already compromised, seemed to be growing more and more critical. At divers points the ammunition had sensibly dwindled. Our companies, without reserves in rear, saw themselves threatened in front by superior forces, and upon their left by numerous squadrons appearing to the east of Villers-Bretonneux. With his 7 battalions, exhausted by this pro-

longed struggle, and the two batteries remaining to him, Colonel Du Bessol contended against an equal number of German battalions, 4 of them composed of fresh troops. The latter had scarcely fired their first cartridges; and were supported by more than sixty guns, which prolonged the fighting line to the east of the cavalry division. As has already been said, two of our batteries had been silenced, and added to this our infantry fire became feeble and desultory. These circumstances betrayed the impotence of our efforts, and it was felt that the decisive moment was approaching.

IV.—Decisive Attack.

General Farre had just gone out to the east of Villers-Bretonneux for the purpose of better following the incidents of the combat, when the enemy, profiting by our abated fire, seized the grove lying to the north of Morgemont Wood. His position here was only 600 paces from our line of battle. In the meanwhile the number of his skirmishers was increasing in front of the railroad embankment, which had now for a short time been a target for his artillery. An attack was preparing against this point, which soon became untenable. The assailant, arriving from the north, and taking our soldiers in rear, forced them to evacuate their shelter-trench, which was forthwith seized a second time.

Colonel Du Bessol, whose horse had just been killed, again led forward the groups of Chasseurs and Marines that he was able to get in hand. Animated by his example, these recruits, though now severely overtaxed, succeeded in pressing the enemy back.

However, the violence of the adversary's artillery fire prevented a recapture of their improvised intrenchments.

At this moment, towards 4 o'clock, the gallant chief

of our 3d Brigade was so severely wounded as to be obliged to leave the field.

At his departure, the zeal of his soldiers flagged.

An unimportant circumstance had at this point of the action the effect of disturbing the *morale* of our forces, and compromising their last efforts. One of our batteries (*canon de* 4) in retiring, entered Villers-Bretonneux at a gallop. The Mobiles of the 48th, seeing it pass, and imagining that a retreat had been ordered, followed in its wake in great confusion. Their example was contagious.

The left of our line of battle broke to the rear precipitately. The German skirmishers seized the trenches southward of Villers and pushed vigorously forward, gaining ground to the north of the railroad. By nightfall our men were recoiling from all sides towards Villers, which was soon riddled with projectiles. General Farre, seeing that the day was lost, and that the Germans were on the point of reaching the foremost houses of the village, gave the signal for retreat. It was effected, for the most part, upon Corbie, while groups of fugitives escaped in haste toward Amiens.

The day was closing. The enemy, no doubt fatigued by the prolonged struggle, did not attempt pursuit. His batteries threw a few shells in the direction of our columns; but soon the firing ceased altogether.

V.—Last Incidents.

While on our left fate had declared against us, at the other extremity of our line a fortunate circumstance gave us a momentary advantage.

General Lecointe, at the instance of General Farre, had moved to this side to support our efforts, and protect the flank of the 3d Brigade.

Setting out from Longueau, he had at first, toward 2 o'clock, established the 4 battalions at the time in hand

and his 2 batteries upon the southern border of Blangy Wood. In order then to render assistance to the defenders of Cachy, he had deployed one battalion of the 91st Regiment and one of the 46th Mobiles between this village and Gentelles. The two German companies occupying the latter place were now nearly destitute of ammunition; the reinforcements on which they counted had been directed toward the right; added to this, there were no longer reserves in rear toward Domart.

General Manteuffel had for some time been watching the combat from the height north-west of this place. Upon seeing the German forces leaning toward the right and thus denuding the center, he had for a moment experienced a sense of uneasiness.

To fill the gap thus produced between the I. and VIII. Corps, he had posted his escort squadron and a battalion at the bridge of Domart. He then set off toward the right.

The German companies at Gentelles found themselves isolated, as has been said. Soon they ceased firing, and seeing the approach of reinforcements on our side, retired. General Lecointe immediately retook the village, capturing there a score of prisoners. Then rallying his battalions, he moved forward, gained the road from Amiens to Roye, put himself in communication with Lieut.-Colonel Pittié of the Derroja Brigade, who was defending Gentelles Wood to his right, and pushed on as far as Domart, occupying the nearest houses. Night overtook him in this advanced position. But as the cannonading became less and less distinct toward the north, and as he was likewise without orders, he became apprehensive for his rear, and dared not retain the ground held. He accordingly fell back upon Longueau during the night.

Comments.

1ST.—LOSSES.

Our casualties in the combat of Villers-Bretonneux were estimated at 615 killed and wounded; those of the I. German Corps and the 3d Cavalry Division, at 846 in all. The excess of loss on the side of the Germans is no doubt to be attributed to the necessity they were under of traversing open ground exposed to a very destructive fire.

2ND.—EFFECTIVES.

The Du Bessol Brigade comprehended:—

9 battalions, 750 men each,	6,750 men.
4 batteries, 80 men each,	320 "
Total	7,070 men.

The I. German Corps had in line on November 27:—

10* battalions, about 800 men each,	8,000 men.
15 batteries, about 100 men each,	1,500 "
6 regiments of cavalry, about 400 men each,	2,400 "
Total	11,900 men.

3RD.—CAUSES OF THE DEFEAT.

Our adversaries had then a tangible superiority, particularly in artillery and cavalry. Their strength in the latter arm had permitted them to extend their wings, especially the right, and so threaten our communications. They thus produced a depressing effect upon the *morale* of our newly-levied troops, which was not without influence upon the final result.

In one sense, the rawness of our contingents and the power of the German artillery, would be sufficient to explain our defeat. But, on the other hand, the tactical dispositions made by the two sides, constituted one of

*Including the rifle battalion accompanying the 3d Cavalry Division.

the principal causes. It would be instructive to briefly recall them.

4TH.—TACTICAL DISPOSITIONS.

Orders Issued on November 26.—The views formed by General Manteuffel on the afternoon of this day, were not in chime with the real facts of the situation. They were, however, perfectly logical. In previous encounters, he had seen detachments of our army, composed of the three arms of the service, march upon his advanced-guards, attack them, and then fall back. For him, such movements had not a clearly offensive character; they were rather engagements similar to those taking place upon the front of a defensive position. The Prussian general had hence concluded that we would not make a serious stand until reaching the gates of Amiens; and his dispositions for the next day sprang from this idea. He was, in consequence, to face the necessity of encountering the enemy before making a concentration of his forces. The gap in his lines between his two corps was the result of his failure in this regard.

How did this error arise? Probably from the fact that the 3d Cavalry Division was not able to reconnoitre our positions at Villers-Bretonneux. Contact had no doubt appeared sufficiently established by the combat of Mézières on November 24. Again, the patrols sent northward, on the right of the I. Army, not having encountered our outposts, had failed to furnish their commander-in-chief with sufficiently complete information. In presence of numerous and experienced forces, this simple circumstance might have led to rather grave consequences. But when we consider the number and quality of our troops, it is seen that nothing of the kind could, in reality, have resulted.

Occupation of the Passages of the Luce.

The first operation necessitated by the offensive movement of the Germans, was the occupation of the points of passage of the Luce by them on the evening of the 26th. The commander of the leading section of the advanced-guard of the I. Corps contented himself with establishing guards, of two companies each, at the bridges of Domart and Demuin. This operation was accomplished without opposition. We had, at this period, lost the habit of properly estimating the tactical importance of possessing the points of debouch. This was indeed seen at Altenstadt, near Wissembourg; upon the Sauer, on the day of the battle of Fröschwiller; upon the Moselle on the 14th of August, and on other occasions. Now, upon the Luce, the passages at Domart and Demuin, wooded and deeply-imbanked defiles, could be controlled upon the right bank by forces on the southern crests of the plateau of Villers-Bretonneux, and especially by troops on the borders of those woods in the vicinity from which an open view could be obtained of the issues of these defiles. Our adversaries, well skilled in tactical applications in time of peace, seldom failed to seize, as soon as possible, the points commanding the outlets of defiles. If they did not so act at the time we are considering, it is permissible to believe that they were prevented by some peculiar circumstance. Perhaps indeed these points appeared to them too strongly occupied; or the two battalions composing the head of the advanced-guard found themselves at too great a distance from the gross to be assured of timely support; or, again, the reason was perchance that the day was too far advanced to permit this operation to be undertaken. Whatever may have been the state of the case, the result was to throw an advantage into our hands, from which, unfortunately, we were not able to profit.

ORGANIZATION OF THE DEFENSE OF VILLERS-BRETONNEUX.

It is difficult to follow the various events of the combat of Villers-Bretonneux without asking ourselves:

1st—If the position taken up by our troops for the protection of Amiens was the most advantageous.

2d—If the defensive organization of the plateau of Villers-Bretonneux responded to the situation, and to the topographical conditions of the *terrain*.

The position Villers-Bretonneux-Boves presented several inconveniences. Our forces were here obliged to fight with a marshy river in their rear,—a circumstance exposing them to the dangers of a disaster. Moreover this position was too extended for the feeble effective at our disposal. These defects had been pointed out. It is probable that the influence of the occasion, which can not be properly appreciated to-day, prevented due account being taken of them.

The true locality for defense was, it would seem, upon the right bank of the Somme, either between Camon and Vecquemont or between Corbie and Bray. In both cases the front was covered by an obstacle difficult to pass; the flanks rested upon solid points of support; the lines of retreat were protected from the enemy's enterprises; and, finally, the ground offered to the defense fields of fire, which, without being as favorable as those at Villers-Bretonneux, were yet sufficiently open to render the approaches to the line of defense difficultly accessible. The occupation of the plateau between Bray and Corbie would have constituted upon the flank of the line of march of the I. Army so serious a menace as to prevent it from moving upon Amiens before having repulsed or destroyed our forces.

But, as has before been observed, it appeared more natural to take post astride the principal roads pursued by our adversary, and thus intercept him, while keeping open the lines of retreat toward our places of the North

by way of Corbie. Such was the reason for the selection of the plateau of Villers-Bretonneux.

It remains to be seen whether the actual character of the defense corresponded to the topographical conditions of this section.

It is certain that to the south of the villages of Gentelles, Cachy, and Villers-Bretonneux, the ground presented veritable *glacis*, so favorable to the defender that this region seemed in every way suited to form the principal line of resistance.

In advance of these positions, about a mile and a half to the south, the borders of the woods of Domart, Hangard, and Morgemont, formed a new line of shelter from which the *débouchés* of the valley of the Luce could be commanded.

In this valley itself, the villages, which were surrounded by trees, hedges, and marshes, offered to our troops points easy of defense (notwithstanding the restricted outlook that could be obtained from them), had preparatory field-works been thrown up there.

Lastly, it would have been possible to find still farther to the south, upon the roads followed by the German columns, advantageous outpost positions, where detachments composed of all arms would have been able to stop the heads of advanced-guards for several hours, and force them to deploy and come into action under unfavorable conditions.

The *terrain* here, then, permitted the establishment of a line of outposts and three successive lines of defense upon which the blows of the assailant would have been delivered in vain. But this would have required an army corps of 30,000 experienced men, large reserves, powerful artillery, and a cavalry force of some strength to protect the flanks of the position against turning movements. General Farre and Colonel Du Bessol lacked all these advantages. Their feeble resources did

not permit them to reinforce their point of support on the right, the village of Gentelles, even by a battalion and a battery. Then time was wanting in which to construct the necessary shelter-trenches upon the line of battle. Finally, the obligation imposed upon them, especially with recruits, of retaining control of the passage at Corbie, put them under the necessity of concentrating the defense around Villers-Bretonneux itself. It is essential not to lose sight of the fact, moreover, that during the morning of November 27, Colonel Du Bessol had not for a moment under his direction more than six battalions and three batteries, about 4,800 men, to resist, upon a space of 5 miles, an army corps reinforced by a cavalry division.

The occupation of the plateau of Villers-Bretonneux, in the way in which it was ordered, condemned our troops then to a passive defense, and cast the balance of advantage against them at the outset. But was it possible to act otherwise?

Employment of the Different Arms.

If it is necessary to seek elsewhere than in the weakness of our means of action and the inexperience of our levies the causes of the success of our adversary, they are in a great measure to be found in the manner of employing the forces at his disposal and in the tactical methods adopted by him for marches and combats.

With him, the distribution of the various echelons on the march, a distribution which was the result of the experience and habits acquired during his grand manœuvres, had, respecting combats, marked advantages. The first echelon in deploying and sustaining the action, exhausted our efforts. The second, upon entering the fighting line, found an opponent who had sometimes made great progress, but who had been more or less weakened, and was now out of condition to face a new

attack. This circumstance, of such frequent occurrence in 1870, presented itself again, as we have before seen, in the combat of the 27th November. The deployment of the main body of the I. German Corps to the east of Morgemont Wood, and especially the bringing into action of the Corps Artillery, were in reality decisive acts. In the eyes of our skirmishers, these were new and important reinforcements, which had made a well-timed advance upon them to endeavor to crush them under the weight of numbers.

This fact is a fresh demonstration of the necessity of having in reserve on the side of the defensive, not merely a quarter of its effective, but as strong masses of infantry and artillery as possible.

From another point of view, it is not difficult now to gauge the advantage which we left in the hands of our enemies by abandoning to them the valley of the Luce, and the southern borders of the woods covering it to the north. The German battalions and batteries were thus given a favorable opportunity to manœuvre in entire security in the neighborhood of the battle-field, in a long sheltered passage-way traversed by roads; then to take up, at their leisure, the combat positions selected upon the plateau.

Lastly, in their offensive, our adversaries once more pushed their frontal attack to the most advanced cover afforded by the *terrain;* and, while maintaining a lively fire on this first combat line, straightway made a thrust against a flank, the movement being soon transformed into a decisive assault. Here again, faithful to their principles and habits, they delayed all offensive movements upon open ground until the instant when their artillery had weakened the fire of the defender and rendered his shelter almost untenable.

At Villers-Bretonneux, as in previous combats, it was by the employment of masses of artillery against the

weak points of the adversary's position, that they produced those astounding effects by which the most energetic attempts at resistance were overborne. However, this artillery was able to come into line only by successive deployments. This fact, the natural consequence of the formations necessarily adopted for the march, would have exposed the German batteries to serious dangers, had they been confronted by a very superior force of this arm.

For us, it is interesting to note that the character of the infantry combat seemed to be modified under the influence of the new weapons. The too-compact formations adopted in the beginning of the war were abandoned, and the same officers who had made use of them in Alsace and Lorraine, now employed a sort of dispersed order, with the supports at 450 yards from the chain, and the reserves 900 yards in rear. An advance had then been made in battle tactics; and it was thus that at Cachy a single battalion was able, for several hours, to contend against a force that far surpassed it in numbers.

A fact of considerable importance to us in the combat of Villers-Bretonneux is the result obtained by a small number of veteran officers with young soldiers devoid of military training, who had been called to service only a few days before the action, and were poorly fed, poorly clothed, destitute of cavalry, deficient in artillery, and whose organization was without cohesion.

The enemy had taken our men for veterans, and the resistance encountered had not failed to make an impression upon him. Symptoms of weakness were observed at the end of the action, it is true; but where are the troops who have never passed through such an experience? In reality, this combat represented a remarkable effort, which, although uncrowned by success, yet proved that in the ranks of our conscripts there was

enough courage and energy to give to the defense of the country a most honorable character.

§ 7.—NORMAL DEVELOPMENT OF A COMBAT.

What most forcibly strikes us in the combats just described, is then the part of the offensive,—the ebb and flow of success characterizing the course of its action, the preponderance it finally acquires.

In the encounter at St.-Privat, however, one is impressed rather by the vigor of the defense. At Trautenau one distinctly recognizes the successive development of both these modes of action; and in the last stage of the combat, the advantages which the resumption of the offensive assured to the Austrians.

At Villepion, it is again the offensive, favored by a numerical superiority, which gives success to troops void of military training or experience.

At Podol, it is still a resolute, energetic, and obstinate offensive, which triumphs over a formidable and well-trained foe.

Finally, at Villers-Bretonneux, the defensive makes its inferiority palpable.

In these various occurrences, the hostile meeting was the result of unexpected and dissimilar circumstances. The action was entered upon under conditions impossible to foresee, and which suddenly gave rise to one of those crises so frequent in the life of armies, where the *coup d' oeil*, decision, courage, and experience of the leader, have such brilliant occasions to manifest themselves.

Yet however diverse may be the initial stages of combats, history shows us that the action is developed in a manner which, without being uniform, presents identical, almost regular phases. Usually there is a prelude to the engagement, then a moment when the fire reaches

its greatest intensity, then a decisive attack, and lastly, a result.

This development of the combat is neither due to chance nor to a method of action grown out of custom; but rather to the necessity of having recourse to a particular tactical order, and to the logical employment of means of destruction corresponding to a maximum effectiveness. This tactical order and this manner of employing forces in action, are the consequences of the power and destructive effects of the arms of the present day.

There is, then, in the conduct of the modern combat, a sort of uniform countenance, a normal type, with which it is necessary to have a thorough acquaintance in both its offensive and defensive aspects.

This type can only be the expression of a general theory approaching the reality more or less closely. It will not be possible to bind by a fast rule an event which, more than all others, is exposed to the caprices of fate and the mischances of the unforeseen.

But it may serve to give a proper direction to our ideas concerning the principal periods of the contest, and upon the general methods employed to insure a favorable issue.

It has already been seen that in 1866, the action was in most cases carried on by divisions; in 1870, the army corps seemed to be the grand combat unit.

Henceforth it will probably be the same.

1ST.—THE OFFENSIVE.

In consequence of studies made in different directions since the Franco-German war, the Prussians have assumed that in the future an offensive combat will develop itself as follows:—

Preparation for the Combat.—The army corps is marching

upon a single road. For several days the cavalry scouts have been pushing back the patrols of the enemy; the advanced-guards of the two forces approach each other; the front finally becomes clear; the masses are in contact.

Prelude to the Combat.—The cavalry of the advanced-guard endeavors to pierce the screen established by the adversary in front of his lines, with the intention of reconnoitring his strength and position. It seeks to move around his flanks to get a glimpse of his rear.

After having examined the situation and gathered necessary information, the commander of the advanced-guard, with a view to forcing the adversary to unmask, engages all the artillery at his disposal at a distance of about 1600 yards from the hostile outposts.

The infantry forms in combat order upon one flank of the batteries. The cavalry holds itself upon the other, but at a distance, prepared to carry out the duties of protection and surveillance intrusted to it.

The combat begins; the assailant gains ground to the front until serious resistance is encountered.

He is now in the presence of the principal hostile masses, and their fire forces him to pause. His object at this stage is only to hold his position and resist the counter attacks of the enemy. He will often be reduced to a tactically defensive rôle; and in order to come off with honor, he must especially possess the qualities of combativeness and tenacity.

This prelude has the character of an offensive reconnaissance, and should force the enemy to deploy. The artillery plays here the principal part.

Development of the Combat.—The action being joined, the question is now to give it importance and a decisive result.

The sound of the cannon should bring the corps commander and the chief of artillery to the front, where they may be able to judge of the situation.

It is essential, first of all, to estimate the gravity of the affair.

To this end the corps commander augments the proportion of artillery, and brings into line, sometimes beside the batteries already in action, all the guns in hand.

The infantry of the gross passes from the order in column to a close formation, ready to deploy; its batteries move forward to reinforce those of the advanced-guard.

The corps artillery takes post upon the flank from which the corps commander has decided to make his principal attack. The batteries are protected by infantry occupying their intervals, and by cavalry on the flanks. The artillery engages, if it is able, by groups of four batteries, echeloned or separated by the spaces necessary for the infantry. (*See Plate XIII.*)

When the latter enters into line, it advances beyond the batteries.

This first phase of the combat is ordinarily a contest of guns. The infantry contents itself with keeping up a fire at points seven or eight hundred yards from the enemy and half this distance in front of its own batteries. As a rule, it constantly endeavors to gain upon the adversary's infantry and reach his batteries, especially by means of flank movements. In the contrary case, it waits until its artillery has acquired a marked superiority; its fire is then steady and measured, and the chain has yet little density; reinforcements are brought up but sparingly; and as much as possible the skirmishers provide themselves with shelter.

This period in the combat may last several hours; and it is the one in which the troops have the greatest

need of tenacity and forbearance, for the state of immobility in which they are placed, saps their moral force, especially when they see constantly before them the litter-bearers taking off the wounded.

The cavalry, during this time, does not cease to manœuvre upon the enemy's wings, in order to discover his strength and the character of his movements.

At the end of this period the combat has acquired full intensity.

Decisive Act.—At the moment when a marked drooping of the enemy's fire is observed, the corps commander trains all his guns toward the point of the hostile position on which the decisive blow is to fall.

The remainder of the line (called by the Germans the demonstrative wing, and which, as this appellation indicates, has been appointed to make a secondary attack) advances and gives definite shape to its offensive movement. The artillery draws near the enemy; the skirmishers thicken their chain and increase the volume of their fire, approaching to within five or six hundred yards of the foremost hostile line.

The supposition is that the corps has, up to this point, been able to completely engage only one division. The second, to which has been delegated the duty of making the principal thrust, has passed to the combat formation,—one brigade in first line, its regiments deployed side by side, and one in reserve, the cavalry on the outer flank. This division moves then toward the point of attack; its batteries, leaving their first position, hasten to rejoin it, placing themselves in the centre, abreast of the second line, and enter vigorously into action within effective range of the adversary.

They are disposed thus in the middle, because in the interior wing they would be speedily masked by the infantry, while at the other extremity they would be too

much in the air, and exposed to the risk of being forced to suspend their fire prematurely.

When the second division has adopted the formation for the attack, when the fire of the enemy has slackened and the *demonstrative wing* made its forward pressure felt, the moment for the delivery of the decisive blow has arrived.

It will consist, at first, in a simultaneous assault upon the two principal groups of the enemy.

The latter has been able to discern the movement prepared against his left wing; he will move his reserves to this quarter or content himself with forming a defensive crotchet. The corps artillery seeks then to take him in flank; all the batteries aim their blows at the exposed wing and at the reserves endeavoring to come up.

Then, when the situation seems ripe for the action of the wing delegated to deliver the decisive stroke, the infantry of the first line, supported by the divisional batteries, advances to within 400 yards of the enemy, reserving its fire, if possible. After closing up to within 300 yards, the men fall into file-firing. The principal line approaches the chain, and the charge is sounded.

Upon the entire front how solemn the moment, how moving the drama, how irresistible the enthusiasm! One assailant group penetrates to a point in the enemy's position; all the others follow; the hostile force gives way; its lines are seized by the troops of the offensive.

If it has been possible to conduct the action thus, it is not doubtful that this decisive act will lead to the capture of the enemy's positions and to the end of the combat.*

2ND.—THE DEFENSIVE.

Preparation for the Combat.—The two divisions of the

* See the *Revue militaire de l'Étranger*, year 1883.

corps will feebly man the principal points of the defensive line. The cavalry will be sent to the front to screen the position and observe the movements of the adversary.

The corps artillery will take post in rear of the line, generally opposite the center. Sometimes, in order to lead the adversary to a deployment, it pushes to the front, supported by infantry, and opens fire as though preparing for an offensive movement. The object of its manœuvre being attained, it then falls back to its first station.

The divisional artillery will approach the threatened flank for the purpose of obliging the enemy to extend his lateral movements.

The infantry will be distributed along the front, which has previously been divided into sections. The brigades and regiments will be established side by side, occupy all points of shelter presented by the line and throw up field-works.

One brigade, two if possible, will be placed in reserve, to enable superior forces to be brought to bear against the enemy at the menaced points. On the strength of the reserves depend the defender's chances of success.

Lastly, if it be practicable, there will be formed a special detachment composed of the three arms, strengthened especially in cavalry and artillery, with which to manœuvre upon the menaced flank, follow the movements of the enemy, force him to extend and consequently to weaken his lines, and lead him into error respecting the development of the defender's front.

Prelude to the Combat.—This prelude will, on the defensive side, take on the character of advanced-guard combats. At first the advanced-posts will be slowly evacuated, the resistance made here being sufficiently stout,

however, to compel the adversary to deploy and fatigue his forces.

On the appearance of the enemy's columns, the divisional batteries pointed upon the approaches to the positions, open fire. If possible, the action of the artillery commences upon the center, with the intent of concealing the flanks of the position. Its strokes should oblige the adversary to deploy, and also serve to protect the retreat of the outpost detachments.

Development of the Action.—A duel of artillery now takes place. The defender at once unlimbers all his batteries. He knows that those of the assailant must be brought piecemeal into action, and he should be able to overwhelm them from the very outset, and thus assure to himself an important advantage. The infantry, posted behind shelter 300 yards in front of the batteries, opens fire upon the enemy on his approach to within seven or eight hundred yards, and confines itself to an endeavor to curb his efforts. The combat becomes general, and continues until one side or the other gains a sensible advantage.

Decisive Act.—As soon as this advantage becomes well pronounced, preparation is made for the decisive act. All the reserves and all the remaining batteries of the corps artillery should be moved toward the menaced quarter.

The combat, especially the contest of artillery, increases in intensity up to the moment when the assailant infantry moves forward upon the decisive point.

It rests then with the artillery and the massed fire of the infantry, to quench the ardor of the adversary and check his principal attack.

If this is effected, the defender gains the ultimate object of his efforts,—the opportunity to assume the offen-

sive. He ought to seize this rôle without loss of an instant, bringing to his aid his entire remaining forces, and throwing himself upon the opposing troops with a violence that should insure their destruction, and compel victory to declare for his side.

FOURTH CHAPTER.

BATTLES.

§ I.—BATTLES OF *RENCONTRE.*

Many have sought to classify battles, according to their general characteristics, into a certain number of different types.

In practice these classifications do not exist.

When two armies are in movement, it comes to pass that one of them after making an offensive march of some days' duration, encounters the cavalry of the enemy, and engagements take place between the opposing forces of this arm. Soon these affairs are multiplied; the distance separating the armies gradually diminishes; the movements of the assailant take on the character of manœuvre marches; the masses of the adversaries close upon each other.

If the mounted troops have properly discharged the service to which they have been dedicated, the generals-in-chief will receive such timely warning of the presence of the opposing bodies as to enable them to make the dispositions, offensive or defensive, suited to the requirements of the situation.

In this case the hostile meeting becomes a *pre-arranged* or *premeditated battle.*

If, on the contrary, isolated combats take place upon the front, obliging new fractions to come into line, the cavalry to fall back upon the wings, the batteries in rear to take post for action, and the supports to hasten forward to assist in the contest, there will soon be developed a general engagement, which may very properly be called a *chance battle*, or *battle of rencontre.*

Under the ordinary conditions of warfare, this will be the more frequent case.

The battle of *rencontre* is then the rule, the premeditated battle the exception.

This classification modifies in no degree the distinction existing between the offensive and the defensive.

It is necessary to bear in mind that a battle offensive in the beginning, may in the end become defensive, and conversely.

It would be well then to adhere to this classification, as do the Germans. They appear to-day to have well-settled ideas on this subject.

"The probability of battles of *rencontre*," says Major Meckel, professor at the Military Academy, "is increased by the independence of action to-day allowed the various fractions of an army. The initiative assumed by the V. Prussian Corps at Worth, is an example of this.

"The battles of August, 1870, with exception of that of St.-Privat, were, on the side of the Germans, battles of *rencontre*. Some of them were inaugurated by separate fractions, even in opposition to the desire of the supreme directing authority. The great battle of the 18th of August itself, notwithstanding the carefully prepared plan, exhibits to us the IX. Prussian Corps engaged in a decisive contest before the hour fixed, in consequence of unfavorable circumstances.

"This action assumed then, accidentally, the character of a casual engagement, always so difficult to satisfactorily regulate.

"In every chance battle, the advantage is enlisted on the side of that adversary who is first able to clearly comprehend the situation, and get all his forces in hand.

"On the contrary, the one who prefers a pre-arranged to an accidental combat, is already in a condition of inferiority.

"The battle of *rencontre* is a proof of the activity and vigor of the troops.

"The influence of chance is here all-controlling, and invariably favors the more audacious side. If the assault is made suddenly and with spirit, the battle is already half won. Though such an attack may sometimes fail against an enemy in position, it will probably be rewarded by brilliant success if made with equal violence against the same enemy on the march.

"The first rule to be observed respecting battles of *rencontre*, is to reduce the enemy to the defensive. This result becomes easy in proportion as the region offers few advantageous positions.

"When there are *points d'appui* upon a combat site, the struggle here becomes very spirited.

"In these battles of *rencontre*, the features which in a previously planned action precede what is called the decisive act, are here merged into it.

"This act takes place upon separate parts of the battle-field, and at different hours. It becomes subdivided, and is dispersed on different sides. But it ought none the less to be clearly discerned, and to become, as in premeditated battles, the aim of the supreme efforts."

We see from what has been said that battles of *rencontre* are to a less degree than others, governed by fixed rules. This observation applies to the mode of action of the grand units during a contest; circumstances alone can determine this. There exist, however, general principles which are recognized in all armies as guides in the combat, and which may be set in relief by an analysis of the facts of war.

We are thus led to a study of the usual case—the battle of *rencontre*. The beginning of the campaign of 1870 furnishes much useful instruction in this regard.

§ 2.—BATTLE OF FRÖSCHWILLER, AUGUST 6, 1870.

1ST.—MOVEMENTS OF THE ARMIES, AUGUST 4 AND 5.

French Army.—As a consequence of the combat of Wissembourg, Marshal MacMahon resolved to assemble the troops at his disposal at Reichshoffen.

This concentration took place as follows:—

On August 4, the 3d Division of the 1st Corps (Raoult) moved from Haguenau upon Reichshoffen.

The Lartigue Division, leaving the 87th Regiment at Strasburg, started on this day for Haguenau with 2 squadrons of the 6th Lancers, and the General Artillery Reserve. At daybreak on the 5th, it reached Gunstett, after a night march, and gained Eberbach, while the Artillery Reserve took station on the heights westward of Wörth. (*See Plate XIV.*)

On the same day, the 2d Division of Reserve Cavalry (General Bonnemains) changed position from Phalsbourg and Saverne to Haguenau and Reichshoffen.

The 1st Division of the 7th Corps (General Conseil-Duménil), which had reached Mulhouse on the 4th, received orders here at 7 P. M. on this day, to proceed to Haguenau and thence to Reichshoffen. The 1st Brigade, commanded by General Nicolai, reached its destination during the day of the 5th; the 2d Brigade was not able to complete its march until some time in the night. As to the Divisional Artillery, stopped at Haguenau on account of the railroad being obstructed, it was not able to rejoin.

On the morning of this day, August 5th, the 1st and 2d Divisions of the 1st Corps, as well as the troops stationed at Seltz and Haguenau, were directed upon Fröschwiller.

The 16th *Chasseurs à pied* took post upon the heights eastward of Niederbronn.

Marshal MacMahon contemplated awaiting the arri-

val of the reinforcements requested from Metz, before engaging.

Thus as soon as De Failly's Corps had been made over to him, he directed it to join him at Reichshoffen.

This order was only partially executed, and the Guyot de Lespart Division was the only one of whose concurrence on the 6th he was assured.

This situation, so full of perplexities during the morning of the 5th, seemed, however, in the eyes of the Marshal, to take on a different complexion in the evening, as witness his letter of the 6th to General De Failly.

He thought then that the German army was marching upon Strasburg or aimed at rejoining the army on the Sarre. In the first hypothesis it was his intention, with the aid of the 5th Corps, to throw himself upon the right flank of the Prussian columns; in the second, he hoped to turn them, and make an attack near Ober-Steinbach.

"According to information received, and which appears trustworthy," he wrote to General De Failly, "the enemy designs putting himself in march toward the crests of the Vosges, and separating us. Should this movement be carried out, we must strike him in the defiles. If, on the contrary, he occupies only the belt from Wissembourg to Lembach, holding the main body of his forces on the plain, we shall unite in our attack upon him with a view to drive him from his positions.

"Put therefore one of your divisions *en route* immediately. It is desirable that it sleep to-night at Philippsbourg, occupying upon its left the positions commanding the road from Neunhoffen. If the first hypothesis is found to be correct, this division will, at the outset, move to Neunhoffen, and thence upon Ober-Steinbach, which will be attacked on the same day by four brigades arriving by four different roads from the camp at Reichshoffen."

The Marshal was, no doubt, poorly informed respecting the forces of the enemy. His cavalry, moreover, which (except 2 squadrons of the 5th Lancers) had set out on the 5th to rejoin him, was not in condition to reconnoitre effectively; feeble reconnaissances directed toward Surbourg and Lembach had made known the presence of the Germans at these points, and this information had sufficed to lead him to a settled opinion.

To-day, under similar circumstances, the Marshal, better acquainted no doubt with the organization of the Germans, and their formations for the march, would, upon being warned of the presence of important masses at a distance of 5½ miles, have been well satisfied of the imminence of a battle on the 6th.

During the day of the 5th, however, our patrols came into collision near Gunstett and Wörth with those of the enemy; and hostile columns were seen in the direction of Dieffenbach. But the Marshal, confident in the strength of his position and in the concurrence of the 5th Corps, gave himself no uneasiness on this account. The troops completed their camps.

In the evening they occupied the following positions:

The 1st Division of the 1st Corps (Ducrot), between Fröschwiller and Neehwiller, northward of the road from Fröschwiller to Wörth; a battalion of the 45th Regiment at Jägerthal.

The 2d Division (Pellé), and the Septeuil Brigade, to the south of the same road, between Fröschwiller and the Grosserwald.

The 3d Division (Raoult), on the heights between Wörth and Fröschwiller.

The 4th Division (De Lartigue), between Elsasshausen and the Niederwald.

The Cuirassier Brigade (Michel), eastward of Eberbach.

The Cuirassier Division (Bonnemains), to the west of Elsasshausen.

The General Artillery Reserve, between the two brigades of the Raoult Division.

German Army.—This army had lost contact on the evening of the 4th; but knowing that our troops occupied Soultz, it was led to believe that the *débris* of the forces beaten at Wissembourg had retired toward Haguenau. This error was, however, to be promptly rectified.

The cavalry, on the evening of the 4th, was directed to reconnoitre on the following day to a distance of half a march upon the right. This disposition had the effect of enabling it to pick up connection with our army and to become acquainted with our situation.

The instructions given by the Crown Prince of Prussia to this end were thus expressed:—

"The 4th Cavalry Division will leave its bivouacs at 5 A. M., and advance by way of Altenstadt along the Haguenau road, in order to seek the enemy in the direction of Haguenau, Suffelnheim, and Rappenheim, and especially to explore the country; a regiment will be directed from Sulz (Soultz-sous-Forêts) toward the west, as far as Wörth, and will reconnoitre the country up to Reichshoffen."

Our camps having been discovered on the 5th by the Prussian scouts, the commander-in-chief of the III. Army gave orders for a change of front towards the west on the next day. He wished to make this the extent of his movements on the 6th, to enable him to bring up the forces left in rear, and to give a day's rest to the troops then in hand.

In accordance with his instructions, the II. Bavarian Corps was to keep in observation the country in the neighborhood of Langensulzbach.

The V. Corps was to remain at Preuschdorf.

The II. at Surbourg.

The I. Bavarian at Lampertsloch.

The 4th Cavalry Division was to face westward.

The Werder Corps at Reimerswiller was to show front towards the south.

Lastly, the VI. Corps, which had reached Landau on the 3d, was to send a division to Pirmasens.

On both sides, then, there was expectation of an early combat, but not on the 6th.

The battle was foreseen, and yet unexpected incidents were to suddenly transform it into a battle of *rencontre*. Circumstances were indeed soon to bind the hands of the commanders, and to show once more that two armies arriving in presence of each other, should be constantly in readiness to engage.

2ND.—POSITION OCCUPIED BY THE FRENCH ARMY.

The belt at Fröschwiller upon which our troops were posted, extended from Neehwiller to Morsbronn, the front measured on a right line being 4½ miles, or 6½ following the contour of the principal features of the *terrain*.

The summits occupied were at a distance of about 3000 yards from the crests on the left bank, consequently at a convenient distance to be swept by the Prussian artillery; while our guns being of lesser range, could make but feeble response. The front was covered by the Sauer. But to derive benefit from the protection which this stream afforded, it would have been necessary to destroy the bridges, obtain command of the points of passage, and prepare for an effective fire against the shelter found on its banks; the ridges on the right side dominating the outlets from Gunstett, Spachbach, and Wörth, should have been defensively organized. Lastly, the flanks of the position rested in the air.

Our line on the left could be turned by a wood, which diminished the value of the village of Neehwiller in this quarter. Our right flank had no point of support ex-

cept the village of Morsbronn, which was dominated toward the west by the southernmost height of the Fröschwiller group. It would have been advantageous to crown this rounded eminence by field-works, and to occupy the village of Forstheim, commanding the valley of Eberbach, by which our troops could be turned. These dispositions would have been very fittingly completed by the dispatch to the right of a strong detachment of cavalry, supported by one or two batteries (accompanied, if necessary, by infantry), with instructions to manœuvre upon the flank of the hostile columns, while watching their movements.

Finally, MacMahon's Corps, in position upon these heights, had utilized none of the points on the opposite bank as advanced posts, and the reserves at its command were insufficient.

The adoption of other dispositions would have required a higher disposable effective, more powerful artillery, more mobile cavalry, better information upon the situation, and a longer time in which to prepare for the action.

3RD.—PRELUDE TO THE BATTLE.

Very early on the morning of the 6th, the voice of cannon was heard opposite Wörth : General Raoult had brought his guns into line to check a reconnaissance of the V. Prussian Corps. The 1st and 2d French Divisions were at once under arms. The other divisions, instructed to this effect by the Marshal, followed their example.

In a little while, each regiment occupied its assigned combat post.

The right, composed of the Lartigue Division, was formed in two lines from Morsbronn to Elsasshausen. It occupied the Petit-Bois, the Niederwald, and the plateau to the south. Holding a space from 2 to 2½ miles in extent, it had in first line only two regiments

and a chasseur battalion : on the extreme right stood the 3rd Tirailleurs (Colonel Gandil), which was able to dispose of but two companies for the occupation of Morsbronn; the 1st Chasseur Battalion (Commandant Bureau) came next; then the 3rd Zouaves (Colonel Bocher). The 56th Regiment held itself in second line.

In the centre was stationed the 3rd Division. Its 2nd Brigade (Lefebvre), composed of the 2nd Tirailleurs and the 48th Regiment of the Line, occupied the ground between Elsasshausen and Fröschwiller; the 1st (L'Hériller), composed of the 36th of the Line, the 2nd Zouaves, and the 8th Battalion of *Chasseurs à pied*, held the spur extending from the vicinity of Fröschwiller towards Görsdorf.

On the left, the 1st Division was posted in two lines from Fröschwiller to Neehwiller.

The Marshal kept in reserve the 1st Brigade of the Conseil-Duménil Division, under command of Colonel Champion. It took station behind the Lartigue Division. The Cuirassiers of the Michel Brigade were placed on the left of this brigade The 2nd Brigade of the same division was still *en route* to rejoin the 1st.

Behind the right of the Raoult Division stood the Pellé Division, having on its left Bonnemains' Cuirassier Division and the Septeuil Cavalry Brigade.

Later, while the combat was in progress, the 1st Tirailleur Regiment was attached to the Conseil-Duménil Division, and the Montmarie Brigade to the Raoult Division, together with the 78th of the Line.

The Artillery Reserve was held to the west of Fröschwiller.

The French army formed thus a broken line, fronting east and north-east, the salient resulting from this disposition being covered by the wood of Fröschwiller.

The reserve was a weak force made up of the Pellé and Conseil-Duménil Divisions;—the former still suffering

in *morale* from the effects of its defeat at Wissembourg, the latter stripped of artillery and impaired by the fatigues of a long march.

As to the artillery of the reserve, it was not in condition to contend with that of the enemy.

Our troops were scarcely in position, when the cannonading ceased on the front, to be taken up on the left. The II. Bavarian corps attacked the 1st Division, conformably to its orders. These directed it to support the V. Prussian Corps as soon as the latter had become engaged.

The Bavarians were brought to a halt on the borders of the forest of Langensulzbach by the 1st Zouaves (Colonel Carteret-Trécourt) and the 45th of the Line. Finding it impossible to debouch from this quarter, they made their way into Fröschwiller Wood, but were unable to hold their ground here, being pushed back by the 2nd Tirailleurs and the 48th of the Line. General Hartmann having received instructions to break off the action, gave orders at this juncture for the withdrawal of his troops. Our left was thus given a respite, which lasted until about noon.

The results thus far of the engagement at this point were as follow: The Bavarians were repulsed with a loss of 600 men. The casualties in the Ducrot Division were about the same. Commandants Marion of the 1st Zouaves and Jodosius of the 2nd Tirailleurs, were killed.

In the meantime, on our right, General Lartigue had, with the 1st Chasseur Battalion (Commandant Bureau), driven in a Prussian detachment, which from Bruchmühle had been disturbing our grand-guards.

4TH.—DEVELOPMENT OF THE ACTION.

First Period.—After a short interval, the artillery of the V. Corps came into action upon the heights on the left

bank of the Sauer, and opened fire upon our positions. It was almost immediately supported by the guns of the 21st Prussian Division, which commenced an attack against our right.

A formidable artillery mass of 108 pieces was thus deployed in our front, deluging us with projectiles.

Our divisional artillery, supported by 4 batteries of the General Reserve and 2 mitrailleuse batteries, endeavored to respond. Forty-eight field-guns and twelve mitrailleuses were thus in action for a short time. But inferior in number, range, and precision to the guns of the enemy, this artillery force soon recognized its impotence. It was found expedient to withdraw, first the mitrailleuses, then the reserve batteries, and to leave to the divisional batteries the duty of sacrificing themselves to the necessity of a prolonged resistance.

At this point in the combat, the 21st Division (XI. Prussian Corps) debouched from the wood lying to the east of Gunstett. It moved forward in two columns, one of them directed upon Oberdorf and Spachbach, the other upon Gunstett. The latter pressed on to the Sauer at Bruchmühle. Here 6 battalions of the 41st Brigade, supported by companies of the 20th, attacked our 1st Chasseur Battalion. The latter, despite its critical situation, made an energetic resistance; but soon the commandant and two captains were killed, and being outflanked, it was obliged to fall back.

The Prussians then passed the Sarre and advanced upon our positions.

General Lartigue brought against them a battalion and a half of the 3rd Tirailleurs, and two battalions of the 56th Regiment,—a force scarcely equal to a half of their effective. This inferiority did not, however, prevent our soldiers from repulsing the Prussians. After having rallied the 1st Chasseur Battalion, Colonel Gandil, of the 3rd Tirailleurs, putting himself at the

head of his troops, drove the adversary beyond the Sauer.

The Prussian column directed upon Spachbach had debouched in its turn, crossed the stream, and attacked, in the Niederwald, a grand-guard of the 3rd Zouaves. The latter gave way; the entire regiment then entered the action, but notwithstanding its stout resistance, was forced to abandon the eastern border to an enemy far overmatching it in numbers. Its colonel then asked for reinforcements, and was sent a battalion of the 56th Regiment. Thus strengthened, it threw itself upon the assailant, pressed him back toward Spachbach, and resumed occupation of the eastern skirts of the Niederwald. In this action, Lieut.-Colonel Deshorties and Commandant Pariset lost their lives.

While these events were passing on our right, the commander of the V. Prussian Corps, seeing our artillery overpowered and the village of Wörth in flames, was convinced that the attack had been sufficiently prepared on our centre.

He ordered the 20th Brigade to seize Wörth and the heights of Elsasshausen. The Raoult and Conseil-Duménil Divisions, perceiving the preparations for this attack, took measures to repulse it.

The battle was thus joined upon the entire front. The 2nd Zouave Regiment (Colonel Détrie) was posted between the two roads leading from Fröschwiller and Elsasshausen to Wörth. On its left came the 3rd Battalion of the 36th Regiment, then the 48th Regiment (Colonel Rogier). Farther on, the 2nd Tirailleurs (Colonel Suzzoni), together with the two other battalions of the 36th, held the wood of Fröschwiller. The Conseil-Duménil Division stood in reserve to the west of Elsasshausen, with exception of the 1st Battalion of the 21st Regiment, which was deployed to the right of the 2nd Zouaves.

The Prussians occupied Wörth without encountering resistance, and from the approaches to this village directed upon us a violent musketry fire, which, powerfully seconded by their artillery, rendered our positions almost untenable. Then believing our lines sufficiently shaken, they advanced on the right and left of the Fröschwiller road. But their masses were unable to break through the troops of the Raoult Division. They were even driven back into Wörth by the 2nd and 3rd Battalions of the 2nd Zouaves. Under the personal leading of Commandants Soye and Coiffé, these valiant troops, springing forward with the bayonet, threw them in disorder upon a regiment in the act of debouching, and pushed into the village with them.

Here again, as at Spachbach and Bruchmühle, the attacks of the enemy were repulsed.

Thus at 11 A. M., the German offensive movement had met with an overthrow at all points. Our success was clearly affirmed; but after breaking the force of the assailant's blow, our troops were content to remain in their positions without endeavoring to assume the offensive.

The enemy, on his part, restricted himself to the occupation of the valley, and the road to Haguenau. All his efforts to move forward had proved abortive.

Affairs remained in this condition until about 1 P. M. The Prussian general staff has characterized the situation in the following terms:—

"In these positions, exposed to a terrible fire, the troops held their ground only with great difficulty against the violent and repeated assaults of the enemy. In the meanwhile, the latter, in order to get a solid footing on the slopes, had pressed into service the walls, hedges, buildings, and plantations that abounded there, and which afforded him excellent opportunities to suddenly assail the Prussian infantry and pour upon it a wither-

ing shower of bullets, whenever it attempted to push to the front. At no point was it possible to advance beyond Wörth. Telling losses attended all our efforts in this direction, and these were especially emphasized during the retreats that followed.

"In brief, the three corps of the first line of the III. Army beheld more or less considerable fractions of their forces involved in a combat during the course of which they were at some points obliged, after murderous losses, to renounce advantages already gained; while in other quarters they could only with the greatest difficulty maintain their ground against the impetuous onslaughts of the French."

In the estimation of the enemy, our army had then, at this period of the contest, an advantage over the three corps confronting it.

The success obtained under these conditions shows that with equal numbers and as powerful means of action, we should probably have carried the day in spite of our defective tactical dispositions.

Yet in the actual state of the case, the moment was critical for the Germans. Their left wing was in disorder, and after meeting checks in all their attempts at advancing, they were pushed to the dilemma of leaving the honors of the action with us or recommencing the strife with new energy.

The Crown Prince, who was loath to deliver battle until all his forces were in hand, had already given instructions "not to continue the struggle, and to avoid everything that might induce a fresh one."

It was at this juncture that General Von Kirchbach gave one of those examples of resolution and of assumption of the initiative which have so often been for the Prussian armies warrants of success.

He replied to the Commander-in-Chief that "it was no longer in his power to break off the combat," gave

orders to his two divisions to move forward, and requested the neighboring corps to lend their concurrence in an effort to give renewed vigor to the contest.

In response to the invitation sent him, the commander of the XI. Corps urged forward the march of the 22nd Division. Soon, moreover, the I. Bavarian Corps was to debouch from the wood of Preuschdorf, and mass itself to the south of Görsdorf. Thus an entire new corps was thrown into the balance against us.

Second Period.—Under orders of its chief, the V. Prussian Corps advanced again upon the forces of our centre, which fell back; but its progress was stopped in the wood of Fröschwiller by the 2nd Tirailleurs, and the 78th and 48th Regiments of the Line.

On our right, the arrival of the 22nd Prussian Division at 1 P. M., gave a deadly intensity to the enemy's fire.

At the same time fresh German columns were approaching from all sides.

Marshal MacMahon, from his post near Elsasshausen, followed these movements with an attentive eye. His limited resources did not permit him to make preparations answerable to those of the enemy, further than to advance 4 batteries for the defense of the approaches to Fröschwiller and Elsasshausen.

The Crown Prince having reached the field, sanctioned the initiative of General Von Kirchbach, assumed direction of affairs, and forthwith accelerated the march of all the troops of the second line. To the forces already engaged he assigned as objective the villages serving as *point d'appui* to the centre of our position. The battle was renewed with desperation throughout the entire line.

General Raoult was obliged to send the 8th Chasseur Battalion to reinforce the Lefebvre Brigade in the wood of Fröschwiller.

On our right, a fresh attack upon the Niederwald was prepared by 72 pieces of artillery, with which we had been unable, in any degree, to join issue. Soon Prussian columns, debouching from Spachbach, assailed the northern and eastern borders of this wood. Our troops, under the strain of a combat sustained since morning, had begun to feel the effects of exhaustion; yet notwithstanding this, they kept a good countenance. They realized, however, that they must eventually be forced back by the weight of numbers.

General Lartigue asked reinforcements of the Marshal. The latter in response could send him only a few batteries, and these were very quickly forced to retire.

Soon our infantry, overpowered by the continually increasing musketry fire of the enemy, and the blows of his artillery which we were obliged to receive without reply, found itself powerless, and out of condition to maintain its ground.

The 21st Regiment of the Line had lost its lieutenant-colonel and Commandant Labeaume. Notwithstanding the energy of Colonel Morand, its commander, it was under the necessity of falling back as far as Le Petit-Bois, between the Niederwald and Elsasshausen. The 3rd Regiment of Zouaves, uncovered on one flank, was also compelled to draw off as far as the salient of the Niederwald, opposite Le Petit-Bois. These regiments in their new positions confronted the enemy and obliged him to call a halt.

Concurrently, the 3rd Regiment of the Line, commanded by Colonel Champion, having deployed in advance of Elsasshausen, had charged upon the Prussians in the direction of Wörth, and pressed back the troops which had won ground toward the heights. But it was unable to drive them beyond the Sauer.

The struggle had become furious in the part of the field occupied by the Raoult and Conseil-Duménil Di-

visions, which despite their numerical inferiority, continued to resist with obstinacy.

While the action was thus developing along our front, a grand offensive movement was preparing against our right. The chief of the XI. Prussian Corps, having learned that the Würtemberg troops were coming to his support, sent the 22nd Division to replace the 21st. Then forming three columns, he directed them upon the Sauer by way of Spachbach, Gunstett, and Dürrenbach.

The first then moved forward toward the Niederwald to reinforce the battalions which had succeeded in wresting from us the eastern border and had begun to take possession of the northern edge.

The 3rd Zouaves and the 21st and 56th Regiments of the Line, as well as the 17th Chasseur Battalion, redoubled the ardor of their resistance in an endeavor to hold these new enemies at bay. Although they stood under a most crushing artillery fire, they fought with desperate determination.

The column from Gunstett attacked the 3rd Tirailleurs, already outflanked upon the left.

This brave regiment was obliged to fall back in the direction of the plateaus, where it succeeded in making a stand; but the Prussians then seized the Albert Farmstead,* which, having been set on fire by their shells, was of necessity evacuated by us. The situation of our right wing was rapidly becoming critical.

5TH.—DECISIVE ATTACK.

The third Prussian column, with a strength of 6 battalions and a cavalry regiment (about 6,000 men), had crossed the stream at the approaches to Dürrenbach, and formed into company columns, which from all sides moved upon Morsbronn. Our two Tirailleur companies

*Albrechtshäuserhof.

posted in this village, were making ready to receive this formidable attack, when General Lacretelle, seeing the danger, directed the 56th Regiment to incline toward the point from which the assault was to come, and asked for reinforcements. The Marshal replied that he had no longer a disposable combatant, and that the ground must be held until the arrival of the Guyot de Lespart Division. Relying upon the hope of prompt succor, the Tirailleurs sustained the contest with energy; but soon, turned by the ravine of Eberbach, they were forced to evacuate Morsbronn.

The enemy had now two points of support upon the right bank of the Sauer,—Morsbronn and Albrechtshäuserhof. Moreover the ravine just mentioned afforded him shelter and permitted him to partially turn our right.

The 3rd Tirailleurs, intermixed with the soldiers of various other organizations, retired in the direction of Eberbach, halted in the wood situated to the south of this village, again faced the enemy, and re-opened fire. Our right then extended from this wood to the Niederwald.

But our men were exhausted. Unprotected by artillery and without reserves, they began to lose spirit: they were falling back toward the Eberbach ravine, their ranks meanwhile sensibly thinning. General Lartigue was obliged to recognize that the cohesion of his various bodies was broken up, and that his troops were not in condition to continue the action. He then ordered a retreat, and requested General Duhesme to cover the movement.

Straightway the Michel Brigade, composed of the 8th and 9th Cuirassiers (commanded respectively by Colonels De la Rochère and Waternau), began to form below Eberbach, fronting southward. Notwithstanding the extremely unfavorable character of the ground, it

made dispositions for the charge. Each regiment was formed into column of platoons: the 8th Cuirassiers in first line, the 9th in second, extending beyond the first to the right; and lastly came two squadrons of the 6th Lancers.

General Michel, with sword uplifted, led forward his cuirassiers. They dashed upon Morsbronn with the cry of *Vive la France!* It was then that, through a storm of bullets and under a crushing fire from the batteries of Gunstett, took place this historic charge.

Our horsemen, falling upon the Prussian infantry reforming before Morsbronn, were received by a terrible fire. Passing through the intervals, they reached the village, dashed into the midst of the hostile masses which filled the streets, and soon found themselves huddled together before the barricades lying across their path. They were shot down at short range, and the majority killed, wounded, or captured. Those who succeeded in escaping from the place, had still to fight the Prussian hussars, and the troops encountered on the plain. But there was no longer hope of rallying these scattered horsemen.

This brigade, almost annihilated, was not able to reassemble until the following night at Saverne.

The losses inflicted upon the enemy by this charge were insignificant; but the heroic effort of the Michel Brigade had not, however, been in vain. It had curbed the enthusiasm of the adversary, and permitted the withdrawal of the 56th Regiment, which was compromised. Finally the Lartigue Division had been able to make a movement to the rear.

While this charge was in progress, two companies of the 3rd Zouaves, under orders of Commandant Charmes, sought to recapture the buildings at Albrechtshäuserhof; but after compelling the enemy to retire for a moment, the Commandant fell mortally wounded, and his small force was thrown back into the Niederwald.

The Germans, elated by the retreat of our right, then gave increased emphasis to their offensive. The 56th Regiment, forming the rear-guard, vainly strove to check their advance. Cruelly tried by the converging fire which searched its ranks, and witnessing the fall of its chief, Colonel Mèna, it was obliged to resume its retrograde movement.

When the Lartigue Division reached Eberbach, it was found that its regiments had become intermingled. The generals were endeavoring to reconstitute the tactical units, when a Prussian column was seen debouching from Forstheim. Our right now beheld itself completely turned, and the necessity was urgent for pushing on as far as Schirlenhof.

While passing through this village, the absence of the 3rd Zouaves was noticed. This regiment had remained behind, fighting in the Niederwald. The 56th of the Line then took position to assist in protecting its return. It had not received in season the order to retreat, and the troops had continued to dispute possession of this wood with the assailant.

Soon however Colonel Bocher, perceiving that his regiment was turned and compromised, ordered the firing to cease, rallied around him all the troops within grasp, and forming them into echelons, succeeded in rejoining the main body of the division. But many of his men still remained in the wood. Under the direction of the officers with them, they continued the fire until their ammunition was exhausted. In the end they were obliged to succumb. All not killed, were captured.

This regiment had sustained a loss in killed and wounded of 40 officers out of 65, and 1,580 men out of 2,190. Three hundred of the wounded included in these figures were subsequently found to have been captured. It had thus sacrificed at Fröschwiller about two-thirds of its officers and half of its rank and file.

The combat of the 3rd Zouaves in the Niederwald, will ever be remembered in our army as a warlike event worthy to be honored, worthy to be held up to view as an example.

Masters of Eberbach and the Niederwald, the Germans occupied the right of our original line. It was now about 2 P. M.

End of the Battle.—Notwithstanding the defeat of the Lartigue Division, the Marshal remained undaunted at Elsasshausen, and thought only of continuing the struggle, which still raged furiously on the front of the Raoult and Conseil-Dumênil Divisions.

Toward 1 o'clock, the I. Bavarian Corps had entered the line, giving new impulse to the offensive. It succeeded in gaining the road which leads up to Frösch-willer along the wood of this name.

At the same time, the II. Bavarian Corps renewed its attack against General Ducrot. The latter, however, less closely pressed than General Raoult, was able to send him the 13th Chasseur Battalion of the 18th Regiment, which sufficed for a time to hold the enemy in check.

But to the east of Elsasshausen and Le Petit-Bois, the V. Prussian Corps was able to gain ground, and it became urgently necessary to oppose its farther progress here.

The Marshal threw forward into this quarter the Maire Brigade, which had reached the scene of the engagement only on the morning of this day. This force, composed of the 47th Regiment (Colonel De Grammont) and the 99th (Colonel De Saint-Hilaire), advanced upon Wörth, formed by battalions in double column. The Prussians recoiled before this attack; but coming to a halt near the town, and making use of the cover afforded by their position, they opened a most destructive fire,

killing General Maire and disabling Colonels De Grammont and De Saint-Hilaire.

This occurred at the time the XI. Corps was seizing the northern border of the Niederwald.

It was not long before the Maire Brigade was assailed in flank. Obliged to fall back, it sheltered itself in Le Petit-Bois.

General l'Hériller, forming into a body in this quarter the soldiers that had become separated from their colors, vainly essayed an attack upon Wörth. He was himself wounded, and his command in its turn thrown back.

The Marshal again called upon General Ducrot for reinforcements. The latter, relying upon the 1st Zouaves to curb the advance of the Bavarians, sent him Colonel Franchessin with the 96th of the Line.

This brave regiment at once hastened forward by way of Elsasshausen and Le Petit-Bois to the attack of the Niederwald, and again forced the Prussians to retire; but soon its colonel was killed; the masses of the XI. Corps returned to the charge, and the 96th was cast back as far as Elsasshausen, which was now our one remaining *point d' appui* on the right. Le Petit-Bois then fell into the hands of the enemy.

The situation was grave.

General Colson, chief-of-staff to the Marshal, had just been killed by his side. Nevertheless the latter, bent upon continuing the action, still refused to cede the position to the enemy.

Acting under his order, General Wolf, whose brigade had already been severely tried, made a last attempt to retake Le Petit-Bois.

Before the vigorous onset of our troops, the XI. Prussian Corps wavered for an instant; but the murderous fire which it poured upon us put a term to this fresh effort.

In this quarter, however, our counter-offensive movements had exhausted the enemy and produced a momentary hesitation in his ranks.

"The French artillery at Elsasshausen," says the Prussian account, "directed such a violent fire against the northern border of the Niederwald, and the copse occupied by the Prussians, that the latter were compelled to decide upon a further advance, or consent to forfeit the advantages purchased by such heavy losses.

"To the first alternative, it might have been objected, it is true, that the troops were very much exhausted, that they had been more or less disorganized in the preceding struggles, and that they no longer had at their disposal more than three intact battalions; * * * but on the other hand, to break off the offensive was to give the enemy a breathing space, and invite him to turn with all his forces upon the V. Corps."

It was nearly 3 o'clock. Considering the circumstances of its situation, it had become impossible for the French army to further continue resistance. It was the duty of the Marshal to think of retreat and the means of protecting it.

The only force remaining at hand was Bonnemains' Cuirassier Division. By dint of repeated charges in the direction of Wörth, and at the price of woeful sacrifices, it succeeded, for a moment, in bridling the offensive of the German forces ascending from the valley.

But during this vigorous action, the commander of the XI. Prussian Corps had riddled the village of Elsasshausen with shells, and his infantry had then stormed it, compelling our troops to abandon the place and retire toward the Grosserwald.

We had now no point of shelter save Fröschwiller, which was soon to be beset from the south and east.

The Marshal, still seeking to defend it, ordered to the front all available batteries of the Reserve Artillery.

Unluckily, this movement was tardily executed. It did not take place until the very moment the enemy was debouching from Elsasshausen, and several guns fell into his hands.

All seemed over, when the Marshal made an appeal to the 1st Algerian Tirailleurs. This brave regiment, despoiled of a third of its effectives at Wissembourg, and counting now scarcely 1500 men, deployed before Elsasshausen under a violent fire, and led by its chiefs of battalion, Commandants Sermensan, De Lammerz, and De Coulange, precipitated itself upon the enemy.

The latter was forced back upon Elsasshausen and then driven through Le Petit-Bois into the Niederwald. The tirailleurs even captured 6 guns, but were unable to remove them owing to lack of teams.

Soon, unfortunately, this gallant force, overmatched in numbers, was compelled to give way, and retire in its turn as far as the Grosserwald.

In the meantime, the bodies on the left under General Ducrot, and a part of the troops of the center under General Raoult, held their ground in the wood and village of Fröschwiller, resisting to the last extremity. Our forces, however, were much diminished, and our ammunition was giving out. The enemy overwhelmed us with his fire. Moreover, his masses outflanked us.

Colonel Suzzoni of the 2nd Tirailleurs and Commandant Poyet of the 8th Chasseurs, had just been killed. The 48th Regiment of the Line was finally shaken, and obliged to give way. Then the defenders of Fröschwiller Wood, weakened by their losses, slowly remounted the heights toward the village, where General Raoult concentrating their efforts, stubbornly confronted the assailants. He himself was killed here.

Fröschwiller was surrounded. The resistance continued only on the northern front of the village and in some of the houses; but our brave troops were exhausted, and incapable of holding out much longer.

Several isolated attempts were still made on the outskirts of the town, and Colonel Poissonniers of the 2nd Lancers gloriously sacrificed his life in charging with two squadrons the Prussian batteries to the north of Elsasshausen, which were bringing a flank fire to bear upon our groups in retreat toward the Grosserwald.

It was 5 o'clock. General Ducrot alone had his troops in hand.

He was intrusted by the Marshal with the duty of covering the retreat. With this in view, he formed upon the edge of the Grosserwald, then upon the heights dominating Reichshoffen. He thus held back the enemy's masses, which were exhausted by their very successes, and gave to the *débris* of our forces time to gain Reichshoffen, and thence the road to Niederbronn.

During the entire battle Marshal MacMahon gave the most noble example of coolness, courage, and tenacity.

One of the last to leave Fröschwiller, just before the capture of that place, on the border of the Grosserwald he personally superintended the movements in protection of the retreat. Then proceeding to Reichshoffen, he indicated Saverne as the rallying point.

The enemy began the pursuit, but was soon stopped by the Guyot De Lespart Division, which had just deployed upon the heights to the north and east of Niederbronn.

6TH.—COMMENTS.

Losses.—The casualties in the battle of Fröschwiller were in keeping with the desperation displayed by the combatants. On our side, they reached 760 officers and 20,000 men. Of this number 4,188 gained Strasburg and 6,000 fell into the hands of the enemy. With these deductions, we have a loss in killed and wounded of about 10,000. The German casualties were 489 officers, and 10,153 men, killed, wounded, and missing.

We lost, in addition, 28 field-guns and 5 mitrailleuses.

The effectives engaged were:—

On our side, 46,500 men with 119 guns.

On the side of the Germans, 125,500 men supported by 312 guns.

We had then fought in the proportion of 1 against 2.6.

The losses of the enemy were 7 pr. ct., ours, 21 pr. ct., of the effective.

Our army gave proof, then, in this terrible action, of an energy which made its defeat honorable and added dignity to it.

The battle of Fröschwiller is one, the recollection of which, notwithstanding the pain it revives, is worthy to be religiously cherished. The Germans themselves have done justice to the intrepidity of the vanquished in the following terms:—

"As we have seen, the commander-in-chief of the French forces contended to the last extremity against the superior numbers of the Germans; everywhere his troops had fought with great bravery; his entire cavalry voluntarily sacrificed itself to relieve the pressure upon the other arms. But when he was beset from all quarters, when the single line of retreat was found to be seriously threatened, the resistance necessarily came to an end."

Causes of the Battle.—The battle was begun upon the initiative of Colonel Von der Esch, chief-of-staff of the V. Prussian Corps, who, fearing to see our forces throw themselves *en masse* upon the German left, came to the determination of unlimbering the entire artillery of his corps, and opening the action upon the center.

It was not the design of the Crown Prince nor of Marshal MacMahon to commence the combat on the 6th; both desired to make a concentration of forces.

It is then to the habit of assuming the initiative on the part of the leaders of the Prussian army, that we

must ascribe the origin of this battle of *rencontre.* Pushed too far, this quality may prove a defect, and entail serious consequences. But in the present instance a counterpoise to this danger was afforded by the sentiment of solidarity which prevailed among the Prussians, and the absolute confidence that each force had in the concurrence of the neighboring bodies.

Yet the initiative of the chief-of-staff of the X. Corps was not the sole determining cause of the combat. Marshal MacMahon might have stolen away on August 5; he would, perhaps, have done so had he been certain of the effective of the army before him, and realized its power for offensive action.

The insufficiency of the reconnoitring service in the French army must then be set down as one of the contributory causes of the engagement.

It was, in truth, difficult for the Marshal to gain intelligence of the enemy, since on the 5th almost his entire cavalry force was still on the march to rejoin him. Yet such information was not entirely wanting. On the evening of the 4th, from the highest point of the *Col du Pigeonnier* he had been able to estimate the importance of the hostile masses arrayed on the plains. Moreover, the report made by General Pellé upon the combat of Wissembourg, the reconnaissance of General Nansouty toward Lauterbourg, and the extent of the German positions, should have convinced him that he was confronted by an army more than 100,000 strong.

Again, General De Failly had advised him that it was possible to send only one division to his aid. The 1st Corps was then entirely free to decide whether to accept battle or beat a retreat.

It is permissible to suppose that the Marshal relied too much upon the valor of his troops, while failing to accord sufficient importance to the numerical superiority

and the qualities of the opposing army. He was also ignorant of the power of the German artillery.

Strategical Considerations.—The importance of the line of the Vosges, was shown in relief by the defeat at Reichshoffen.* It now became apparent that this was the true strategic frontier, and that the bulk of the French forces should have been assembled in this quarter.

From this it may then be concluded that concentrations of armies upon the defensive should generally be effected upon those parts of the frontier offering the most advantages to the enemy.

In 1870, the frontier of the Sarre was protected by the fortified place Metz, while that of the Vosges required the presence of an army for its defense.

Tactical Considerations.—From a tactical point of view, a study of the battle of Fröschwiller makes clear, in the first instance, the new method of employing artillery in battle.

The Prussian general-staff refers to the fact in these terms:—

"One is struck, at the outset, by the essential differences between the present method of employing artillery in the German army and that formerly in vogue. Interpolated into the head of the columns of march, this arm made an early appearance upon the field of battle, and its fire, in most cases, preluded the important offensive thrusts. Holding its ground with immovable tenacity when once established upon a point, it constituted there in some measure a fixed frame-work for the line of battle; while the French batteries, on the

* The name by which the battle of Fröschwiller is generally known among the people in France.—Tr.

contrary, in most instances, formed only a sort of movable scaffolding for this line. Favored by superior *matériel*, the German artillery was in condition to give to the infantry the support of which it stood in need, in presence of the more improved rifle of the French.

"It is observed that in the German staff there is a very pronounced tendency to engage the artillery in masses under all circumstances and from the initial step in the action, and to associate it most intimately with the task of the infantry."

Touching the latter arm, the advantages of long-range fire are also made evident in the battle we are considering. This feature of modern small arms had permitted our infantry to retard the progress of the hostile batteries, and the German foot-soldiers to render nugatory the efforts of our cavalry.

But rapidity of fire often produced a premature exhaustion of ammunition, while the losses inflicted upon the adversary were not in keeping with the enormous consumption of cartridges. It was evident that a better method of fire instruction was indispensable.

"With regard to the conditions of the contest, it was surely not always possible," says the Prussian general-staff, "to push the German infantry far enough to the front to enable it to completely protect its artillery against the effects produced by the long-range rifle of the enemy. The advantage given the infantry by the power to fire to great distances, was several times apparent; but, again, it was also seen, especially in the defensive combats to which this arm was subsequently called, that musketry acquired its entire efficacy only at short ranges, and that proper preliminary instruction could alone give to the fire the precision requisite to repulse all direct attacks in the open field."

The mode of action of the Prussian artillery and infantry at Fröschwiller, demonstrated moreover:—

1st.—The utility of natural cover;

2nd.—The necessity of great practical experience in order to turn to account all the accidents of the soil;

3rd.—The considerable advantage which numerous points of shelter give to the front of the line of battle;

4th.—The obligation resting upon the offensive to continually gain ground in front or upon the flanks, and to stop only when the enemy is vanquished;

5th.—The difficulties experienced by the leaders of the smaller units in retaining their hold upon affairs during the combat.

The memorable charges made by our cuirassiers and lancers in the direction of Morsbronn and Wörth, proved that cavalry could no longer break through still intact infantry; that at the utmost it would be able only to temporarily arrest the movement of this arm, or retard its action; that its sole mission consists, then, in sacrificing itself. This being the case, demands should be made upon it to execute a charge, only in the last extremity. As a consequence, its rôle in combats will in general be better defined when restricted to the flanks of armies, where reconnaissance service still offers to its efforts a most useful aim.

The decisive act in the battle of Fröschwiller was the turning stroke delivered against our right. This manœuvre owed its success to the numerical superiority of the enemy, and to the weakness of our line in this quarter.

After the reconnaissance of our positions on the 5th, if the situation of our right flank had been properly estimated, the necessity would no doubt have been apparent, either of diminishing the extent of the front or of strengthening the right by the construction of field-works, the installation of one or two batteries here, and probably by the occupation of Forstheim, which would have precluded access to the valley of Eberbach.

Since these events, it has been asked if our troops ought to have taken the offensive at the moment when the V. Prussian Corps, checked in its efforts, was hesitating over a renewal of its attack.

In replying to this observation, it is proper to remark that the Marshal considered the movements directed against his lines up to mid-day simply as demonstrations, and that he awaited the real attack before coming to a decision.

The chief of an army is alone qualified to decide in a situation so delicate.

Abroad, however, it has been remarked on this subject that our 1st Corps by its neglect in this respect reduced itself to a passively defensive rôle, and that this perhaps still further endangered the issue of the battle.

We have yet to examine what effect the arrival of the De Failly Corps would probably have had upon the fortunes of the day, or at least the Lesparts and Gose Divisions of this corps, which, as we have previously seen, would have been able to reach the theatre of action before noon.

These two divisions would have constituted a reinforcement of 15,000 men and 36 guns, whose timely arrival would perhaps have determined the Marshal to take the offensive after the first repulses inflicted upon the Prussians. This succor might have resulted in changing the whole complexion of the combat. At all events, it would probably have permitted the continuance of the resistance, and the holding of the positions occupied since morning.

Consequences of the Battle.—These were of the gravest possible character. Our defeat entailed the loss of Alsace, opened the country to invasion, and uncovered the right flank of the army of the Sarre, which thenceforth could be easily turned by the III. German Army.

As we have observed, the battle of Fröschwiller, before being transformed by circumstances into a battle of *rencontre*, had been foreseen by the leaders of the two opposing armies. Presented then as an example of a casual engagement, it might very properly be urged against such a designation that this action was not entirely due to chance.

In this connection the history of the war of 1870 offers us, a few days after Fröschwiller, a battle which has a just claim to be considered a type—that of Rezonville. Viewed in this light, it should not be passed unnoticed.

§ 3.—BATTLE OF REZONVILLE, AUGUST 16, 1870.

I.—Positions of the Armies.

French Army.—On August 15, 1870, the French army was in march from Metz upon Verdun. The Forton and Du Barail Cavalry Divisions (3d and 1st Reserve Divisions respectively) reconnoitred the line of march, the one upon the Mars-la-Tour, the other upon the Conflans road.

At about 8 A. M. General Forton discovered at Rezonville two Prussian squadrons on reconnaissance duty.

The latter at his approach fell back upon Puxieux. The Murat Dragoon Brigade was sent in pursuit. Near Tronville it was received by the fire of a battery, and eaned toward the north upon Mars-la-Tour, where it picked up connection with its division. General Forton had then before him at Puxieux the 13th Prussian Cavalry Brigade (General Von Redern), which had been directed to reconnoitre the road from Metz to Verdun and "harass the troops which might be encountered there."

General Von Redern at 11 o'clock had at his disposal

15 squadrons and 2 batteries. Other bodies of horse came up at the sound of his guns, and at 2 o'clock he held 34 squadrons in readiness to engage.

Before this mass General Forton could not hope to maintain himself at Mars-la-Tour with but 16 squadrons, and fell back upon Vionville, where he rejoined the Valabrègue Division of the 2nd Corps, marching in his wake.

These two divisions went into bivouac eastward of Vionville. (*See Plate XV.*)

In the evening, the army occupied the following positions:—

Headquarters at Gravelotte.

The 2nd Corps, in advance of Rezonville, to the south of the road.

The 6th Corps, on the right of the 2nd, northward of the same road.

The 3rd Corps held three divisions and its cavalry between Verneville and Saint-Marcel. Its 3rd Division was still in rear at La Maison-de-Planche, the encumbered state of the roads having delayed its march.

The 4th Corps was on the way to Doncourt.

The Guard stood at Gravelotte.

The Forton and Valabrègue Cavalry Divisions were at Vionville

In the evening, the commander-in-chief sent his corps the following order: "Food will be taken at 4 A. M. to-morrow. The troops will be held in readiness to move at 4:30, horses saddled and tents down. The 2nd and 6th Corps must have 30,000 men before them; they may expect to be attacked to-morrow."

The situation admitted, then, the probability of a battle on the 16th, upon the approaches to the Verdun road. Early on the morning of this day, the Emperor left the army for Châlons by the Conflans road, escorted by the Line Cavalry Brigade of the Guard as far as Doncourt, and from this place by Margueritte's Brigade.

Immediately after his departure, the orders for the movement of the army were countermanded. The commander-in-chief directed food supplies to be obtained and the ammunition to be replenished. "As soon as the reconnoitring troops return," say the instructions, "and it is made clear that the enemy is not in force in this vicinity, we shall be able to repitch our tents."

* * * * "We shall probably set out in the afternoon, as soon as I am informed that the entire 3d and 4th Corps have arrived abreast of us."

Prussian Army.—The commander-in-chief of the II. Army had already decided, on the 14th, to send a part of his forces beyond the Moselle as rapidly as possible. He had reached this river on the same day, and established his headquarters at Pont-à-Mousson, when a telegram from General Von Moltke notified him of the combat of Borny, and requested him to gain the road from Metz to Verdun. He had in hand at Pont-à-Mousson the X. Corps and a brigade of the 5th Cavalry Division. The two other brigades of this division, on this evening, occupied Thiaucourt and Beney, about 9 miles from our line of retreat.

Agreeably to the instructions of the generalissimo, Prince Frederick Charles on the morning of the 15th prescribed to the commander of the X. Corps, General Voigts-Rhetz, who had the 5th Cavalry Division temporarily under his orders, to push the latter "first toward the Metz-Verdun road and then in the direction of Metz, with a view to finding out if the enemy's forces had already quitted the place, or if they were still engaged in effecting their retreat."

The two divisions of the X. Corps were to advance into the Moselle valley and then move to the northwest in support of the cavalry. All the other corps were to be actively urged to the left bank of the Moselle.

In executing these orders, the II. Army, on the evening of the 15th, occupied the following positions:—

After its engagement with the Forton Division, the 5th Cavalry Division had established its three brigades at Suzemont, Puxieux, and Xonville, upon the Mars-la-Tour road, pushing a squadron as far as Jarny. The latter attempted, in accordance with the orders received, to make connection to the north with the cavalry thrown by the I. Army upon the left bank below Metz.

In the X. Corps, the 19th Division was at Thiaucourt and the 20th at Pont-à-Mousson.

The III. Corps (Alvensleben II.) setting out from Vigny in the morning, had passed the Moselle at Novéant and Champey, and toward midnight reached its bivouacs at Pagny and Arnaville, on the left bank. This corps at once directed upon Dornet and Gorze, 1⅞ and 3⅛ miles distant, respectively, two detachments composed of a battalion of infantry and a squadron and a half of cavalry.

The Prussian Guard was at Dieulouard, upon the Moselle, its reconnaissance service toward the west being intrusted to its Dragoon Brigade at Thiaucourt, its Cuirassier Brigade at Bernécourt, and its Uhlan Brigade at Ménil-la-Tour.

The IV. Corps had arrived at Marbache;

The IX. at Verny;

The XI. at Nomény and Moncheux.

The II. was cantoned in rear at Herny.

The 6th Cavalry Division, assigned to the duty of observing Metz, remained at Coin-sur-Seille, covering the right flank of this army.

In brief, counting from the 15th, the road from Metz to Verdun was occupied by a division of cavalry, with a strength of 36 squadrons and 12 guns. The II. Army stood upon the line of the Moselle with four corps, holding three others in rear. Two of these corps only were within less than a day's march of Vionville.

Reports transmitted to Prince Frederick Charles during the 15th, led him to the conclusion that we were in full retreat toward the Meuse, and that it was urgently necessary to move in the same direction. He consequently resolved to make a strong demonstration upon the Verdun road, with two corps and two cavalry divisions.

To give effect to this determination, he at 7 P. M. addressed to his generals the following order:—

"Yesterday evening, portions of the I. Army and the 18th Infantry Division attacked the enemy in front of Metz, and threw him back into this fortress.

"The French army has begun its retreat toward the Meuse. Commencing from to-morrow, the II. Army is to follow the adversary in that direction.

"The III. Corps, conformably to the dispositions already adopted, will cross the Moselle below Pont-à-Mousson, and gain the Metz-Verdun high-road at Mars-la-Tour or Vionville by way of Novéant and Gorze. Its headquarters should be as near as possible to Mars-la-Tour. The 6th Cavalry Division can be pushed forward from Pagny toward the road in question by way of Prégny and Thiaucourt.

"The X. Corps, preceded by the 5th Cavalry Division, is to-day on the march, in part, upon Thiaucourt. It will continue its movement to-morrow toward the road to Verdun, as far as the line St.-Hilaire, Maizeray; and will call to it as promptly as possible the fractions still in rear at Pont-à-Mousson and in the valley of the Moselle.

"The XII. Corps, quitting Nomény, will close up its columns at Pont-à-Mousson and throw an advanced-guard beyond, as far as Régniéville-en-Haye.

"The Cavalry Division will push forward in the direction of the Meuse.

"The Guard will reach Rambucourt with its ad-

vanced-guard; the main body and headquarters will be in the vicinity of Bernécourt.

"The IV. Corps will move its advanced-guards as far as Jaillon.—Headquarters at Les Saizerais.

"Efforts will be made to establish communication in the direction of Nancy with the right of the III. Army.

"The IX. Corps will reach Sillegny to-morrow, cross the Moselle on the next day at Novéant upon the bridge thrown by the III. Corps, and follow the latter in the direction of Gorze.

"The II. Corps will move its head of column to Buchy. The cavalry divisions preceding, should, according as they advance, reconnoitre the *débouchés* and passages of the Meuse, with a view to the ultimate employment of the bridges at Dieue and Génicourt by the X., III., and IX. Corps; of that at Bannoncourt (upon the left bank, a German mile to the north of Saint-Mihiel), by the XII Corps; and of those at Saint-Mihiel, Pont-sur-Meuse, and Commercy, by the Guard, the IV., and the II Corps.

(Signed) "FREDERICK CHARLES."

This order differed in several respects from the instructions issued the same day by the generalissimo, which ran :—

"The advantage gained last evening (battle of Borny) by the I. and VII. Corps, was under circumstances which precluded all thought of pursuit. It is only by a vigorous offensive on the part of the II. Army toward the Metz-Verdun roads through Fresne and Étain, that we can hope to gather the fruits of this victory. The commander-in-chief of the II. Army is empowered to conduct this operation according to his own judgment," etc.

The generalissimo prescribed then an offensive movement on the part of the entire II. Army in the direction of the Verdun road, while Prince Frederick Charles,

nearer the theatre of events, was of the opinion that it would be necessary, first of all, to reconnoitre our situation. Hence the demonstration by his two corps toward the west, with a view to cutting our line of retreat to the passages of the Meuse.

This divergence of views, while it did not remove the operations of the II. Army from the intent of Von Moltke's combinations, threw into our hands an unexpected opportunity of fighting an important fraction of the enemy's masses under advantageous conditions.

II.—Prelude to the Battle.

On the morning of the 16th, in consequence of the counter-order issued to our army by its commander-in-chief, the troops were engaged in eating a hasty meal, when towards 9:30 o'clock the first hostile shells were heard in the direction of Vionville.

They were fired by the batteries of the 5th Cavalry Division. General Voigts-Rhetz had diverted this division from its march upon Saint-Hilaire, and sent it with four batteries to reconnoitre our camp at Rezonville. A brigade of infantry, the 37th, was assembled at Chambley in support.

This reconnoitring force was able to approach within 2,000 yards of the Forton and Valabrègue Cavalry Divisions without encountering any patrols from our side, and at once opened fire. Our horsemen, although surprised, formed immediately, and then fell back toward the north. But the civilian teamsters who accompanied them, frightened by the projectiles, recoiled in disorder upon the 2d Corps (Frossard), which forthwith flew to arms, as was also the case with the 6th (Canrobert).

The two roads pursued by our army formed at the point of bifurcation near the village of Gravelotte, the summit of a triangle whose base extended between Mars-

la-Tour and Jarny along a creek, a branch of the Orne. Upon the left bank of this stream, a country road connected the two high-roads. The surface of this triangle was covered with hills varying in altitude from 250 to 330 yards, the highest point being near the apex at Malmaison. This ground and the road to Mars-la-Tour sloped gradually westward from Gravelotte. The hills were clad in places with woods, while an old Roman road, and numerous paths cut in all directions, connected with the various villages found in the vicinity. Two branches of the Moselle, Chatel and La Mance Creeks, their approaches protected by the woods of Genivaux, Chatel, Vaux, and Les Ognons, crossed the Gravelotte-Metz road. Their beds were deeply sunken, the left banks dominating the right, while Fort Saint-Quentin commanded both; and these circumstances constituted so many difficulties in the path of the enemy upon the plateau, and correspondingly favored our defense.

The field of battle extended from the Jurée ravine to that of the Yron, and from the approaches to Saint-Marcel to the valley descending from Tronville toward Gorze. The ground was undulating, rough, cut up by numerous ravines, open to the south and west, favorable for the action of the three arms, and more advantageous for defense than for the attack.

It however presented few points of shelter. The villages of Vionville and Flavigny, situated opposite each other on the slopes of neighboring heights, were commanded on all sides; and despite their brick houses and hedged and walled inclosures, were of but moderate defensive value. The Bois de Tronville, formed in reality of a thick undergrowth, was devoid of roads, and could be traversed only with difficulty; however its southern edge afforded excellent cover for infantry against thrusts made toward the north. In order to attempt an attack in this quarter, and before ascending

from the Moselle to the plateaus, the enemy was obliged to cross certain deeply-embanked defiles; but he was favored by the woods and ravines which, from Tronville to Gorze, served to veil his movements.

Such was the theatre of the action in preparation.

At the first sound of the cannon, General Frossard's corps was formed in two lines, and advancing with steadiness under the enemy's projectiles, took up position on the heights dominating Flavigny on the east and north. Its right rested on the road to Mars-la-Tour, while the other extremity of the line bent back to the height numbered 311, * facing the Bois de St.-Arnould, and kept under watch the *débouchés* on the left. This corps had since 7th August been strengthened by the Lapasset Brigade; but it was obliged to leave behind as a garrison for Metz, the 3rd Division (Laveaucoupet), which had been severely tried at Spicheren. Its various forces were distributed as follow: The 1st Brigade of the 2d Division occupied the village of Vionville and the hamlet of Flavigny with the 23rd Regiment of the Line (Colonel Rolland) and the 12th Chasseur Battalion (Commandant Joanne-Beaulieu); and a rise of ground north-east of the latter place with the 8th of the Line, which thus stood in support of the other fractions.

The 2nd Brigade (Fauvart-Bastoul), its division general at its head, advanced in deployed formation upon the heights to the left. Next came the Vergé Division: the 1st Brigade (Letellier-Valazé) prolonging the line of battle; the 2nd (Jolivet) forming the right of the crotchet and extending toward the Lapasset Brigade. The latter held in first line the 84th Regiment and a battery; in second line, the 97th Regiment and the 3rd Lancers. Each of these divisions had thrown to the

* 311 meters. Designation on French standard map (scale $\frac{1}{10.000}$). —Tr.

front its two regular batteries and its mitrailleuse battery. Finally, the chief of the 2nd Corps had posted in rear four batteries and his reserve artillery.

The 6th Corps (Canrobert) prolonged the front of the 2nd Corps toward Saint-Marcel, but in rear of the crests, its left near the road. The 3rd Division (Lafont de Villiers), supported by two batteries, was formed in two lines. On the right of this division stood the 9th Regiment of the Line, which of itself constituted the 2nd Division (Bisson). The 1st Division (Tixier) had been left in the approaches to Saint-Marcel, in order to connect the 6th Corps with the 4th on the arrival of the latter upon the scene of action. The 4th Division (Levassor-Sorval) was stationed in second line to the north-east of Rezonville, parallel to the road, with a view to frustrating all attempts at a turning movement aimed at our left.

The Forton and Valabrègue Cavalry Divisions were held in rear of the 6th Corps, to the north of Rezonville.

Marshal Bazaine, especially apprehensive of an attack upon his left, and solicitous to retain control of his line of retreat upon Metz, was careful to move strong reserves to this side. Independent of the Levassor-Sorval Division, he installed the Guard upon the approaches to Gravelotte, in second line: the zouaves close to the road, the artillery on their right to bring a fire to bear upon the ravine of the Jurée between Bois des Ognons and Bois de Saint-Arnould; a brigade of cavalry in the valley at the bend of the old Roman road; the Voltigeur Division (General Deligny), upon the high position at Malmaison; and the Grenadier Division (General Picard), between Gravelotte and Bois des Ognons.

He furthermore requested Marshal Lebœuf to direct himself upon the right of the 6th Corps, and trusted to the judgment of General Ladmirault to hasten forward at the sound of the cannon, with the 4th Corps. The

commander-in-chief then moved off toward the front of the Vergé and Bataille Divisions.

While our troops were deploying, the 6th Prussian Cavalry Division gained the plateaus, and its batteries entered into action. The enemy held then in front of our 2nd Corps, 56 squadrons supported by 30 guns. But in a short time the fire of our skirmishers and the coming into line of other forces, obliged this cavalry to fall back to Sauley Farm, and then as far as the wood of Gaumont. At the same time, toward 10 o'clock, the III. Corps (Alvensleben) debouched from Gorze ravine. Its right column, formed of the 5th Infantry Division, which followed the 6th Cavalry Division, was marching from Novéant upon Gorze and Vionville.* Three battalions and a squadron had been left temporarily in the valley of the Moselle.

The left column, formed of the 6th Infantry Division and the Corps Artillery, was moving from Arnaville upon Mars-la-Tour *viâ* Onville and Buxières. The corps commander accompanied this column.

The Germans, supposing us already far advanced

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*This column had the following formation :—

In front were the outposts (1 battalion and 1 squadron), which, on the evening before, had been established at Gorze. The troops of the 5th Division came next, distributed as under:

Advanced-guard, 9th Brigade (Major-General Von Döring):

Head of advanced-guard:
- 2 squadrons,
- 2 battalions.

Gross of advanced-guard:
- 1 battalion,
- 1 battery,
- 2 battalions.

Gross of Division, 10th Brigade (Major-General Von Schwerin):
- 1 battalion,
- 3 batteries,
- 4 battalions.

upon the Verdun road, at first thought the approaching action was to be on our part but a rear-guard engagement; but they were soon undeceived. Upon reaching the plateau, the 5th Prussian Infantry Division endeavored to effect its deployment there; but the fire of our skirmishers proved sufficient to prevent it.

The 9th German Brigade, forming the advanced-guard, was then thrown into the woods of Vionville and St.-Arnould, and engaged upon their borders. A short time afterwards, its left, having attempted an offensive movement, was cast back, "completely disorganized," upon the wood of Gaumont.

This first attack had, then, been beaten off; but during the action the divisional artillery was able to take up position in the angle of the Vionville wood. The 10th German Brigade then moved into position upon its left. The battle was thus waged on our left by the Valazé and Jolivet Brigades supported by 8 batteries* (2 of them of mitrailleuses), arrayed against the 5th Prussian Infantry Division aided by five batteries. The enemy was able to maintain the conflict only with the greatest difficulty and at the price of cruel sacrifices. However his artillery had, after the first shots, succeeded in acquiring a marked ascendency, and it was in consequence of this that he was enabled to remain on the scene.

III.—Development of the Action.

First Stage.—The entrance into line, at 10:30, of the 6th Prussian Infantry Division gave increased scope to the contest. This force was to afford efficient support to the 5th Division. The first assistance was rendered by a detachment of the 37th Brigade composed of two battalions, two squadrons, and a battery, which had been

* Four of them were divisional and two of them reserve batteries.

placed in observation at Vaudières on the night of the 14th. Although under instructions to rejoin the brigade at Chambley, the colonel commanding it, hearing the roar of cannon while at Gorze, set out in a northerly direction toward the field of battle. His arrival equalized the combatants engaged.

The remainder of the 6th Prussian Infantry Division reached Buxières about 9 A. M., and immediately prepared for action, each brigade formed in two lines. Its guns and the corps artillery were thrown at once to the front and brought into play against the Bataille Division, which at 11 o'clock was thus taken under the fire of 90 pieces of ordnance distributed into three groups of batteries. All their blows were aimed at the 4 batteries supporting the right of our 2nd Corps, and at the villages of Vionville and Flavigny. They were thus preparing for the attack of the infantry.

The 6th Prussian Infantry Division had moved at first upon Tronville. Once in occupation of this place, it made a thrust at the cemetery and at a clump of trees situated to the east, but was unable to command success. The fire of the German artillery redoubled in intensity against Vionville and Flavigny, while four infantry regiments made ready to assail these positions from the north and west. Already the 3 battalions of the 23rd Regiment of the Line and the 12th Chasseur Battalion posted here, had been put to a bitter test. It was the same with the 8th Regiment occupying the clump of trees found between these two villages. Our artillery, mastered by the enemy's, was powerless to afford them protection. Up to this point, however, these troops had been able to stand before the assailant and hold him at bay. But soon our fire becoming languid, the 6th Prussian Infantry Division began to develop its attack. The wood of Tronville and a small valley extending northward from Vionville, favored the

approach of its regiments and permitted them to flank the village. The 12th Chasseur Battalion defending the place was obliged to abandon it, to avoid being turned, and fell back toward Flavigny.

It was now about noon. This action, by leading the German troops to the north of Vionville, had drawn upon the scene the Lafont de Villers Division of the 6th Corps. When the assailant, master of Vionville, endeavored to debouch from the place, he found himself engaged with the 8th Regiment of the Line and the Fauvart-Bastoul Brigade. A furious combat now followed upon the approaches to the previously-referred-to clump of trees, while the Prussian guns concentrated their fire upon Flavigny. General Bataille, sword in hand, encouraged his troops and held them to their posts, notwithstanding the hamlet was now but a heap of ruins. He thus succeeded in stemming the advance of the Prussians for a time; but unfortunately he was soon struck down by a bullet. His division, sorely tried, and overpowered by superior numbers, lost cohesion, and finally gave way. Flavigny was taken at about half-past twelve. The enemy then advanced. The 1st Brigade of the Vergé Division curbed his progress for an instant; but this force being menaced upon its right, and seeing its chief, General Letellier-Valazé, seriously wounded, recoiled in turn. Three of our brigades had thus been driven to the rear. Yet, despite this state of affairs, the forces of Generals Jolivet and Lapasset still remained in position.

Second Stage.—(*See Plate XV.*) The loss of Vionville, Flavigny, and the clump of trees between these places, deprived our front of its only *point d'appui*. The advantage afforded us by the possession of these combat posts now passed to the enemy, and gave him the power, thanks to the superiority of his guns, to plant a

firm foot upon the *terrain* in this vicinity. Our reserves were, however, soon to stoutly dispute possession of the prize.

The favorable results reached by the enemy were, as has been intimated, principally due to the power of his artillery, twenty batteries having been brought into line. Seventeen of these, 102 pieces, converged their blows upon our 2nd Corps, which could respond with only 12 field-guns and 18 mitrailleuses. It was, however, the fire of our infantry that occasioned the most serious losses in the German batteries. Yet added to his over-matching artillery, the balance of advantage in infantry also lay with the enemy. The 23,000 men composing our 2nd Corps and the Lepasset Brigade had been obliged to face about 29,000 Prussians belonging to the III. Corps and to two battalions of the X.

The retreat of the Bataille Division and a brigade of the Vergé Division was the result of these operations. It caused momentary disorder in our ranks on the left; but the vigor of our cavalry and the energy displayed by Marshal Bazaine promptly re-established the poise of affairs.

The Grenadier Division of the Guard was called up to fill the gap left in the line by the troops of the 2nd Corps. In order to stay the progress of the enemy, the 3rd Lancer Regiment was at once directed to charge. This force advanced towards the Prussian skirmishers, but was driven back before being able to close with its adversaries. Then the Cuirassiers of the Guard, led by Colonel Dupressoir, following in the track of the Lancers, endeavored to assail the 10th German Brigade, which was moving forward in the direction of the high-road. Received by a brisk fire, this brave regiment lost in an instant 22 officers out of 47 and 208 men out of 651. It was compelled to retreat.

This thrust was immediately followed by a counter-

attack on the part of two regiments of Prussian hussars that, no longer having infantry before them, succeeded in reaching a battery which Marshal Bazaine had brought up and was posting in front of Rezonville, between the roads from Buxières and Flavigny. The Marshal and his officers were surrounded and forced to draw swords; but the escort, throwing itself upon the hussars, repulsed them.

Meanwhile, the Grenadier Division of the Guard was deployed to the front and south-west of Rezonville. The 3rd Grenadiers had come to the assistance of the Lapasset Brigade. The first shots of the Guard were directed at the 6th Prussian Cavalry Division, now making ready to charge. The latter was forced by this fire to give up its design. The grenadiers then brought all their rifles to bear upon the German infantry attempting to debouch from Flavigny, and its efforts to advance proved ineffectual.

Simultaneously with these events the struggle had been developing upon our right.

During the morning, the 6th Corps had brought into action only the Lafont de Villiers Division. Deployed between the Roman road and the highway to Mars-la-Tour, the latter found before it only some battalions of the 12th Prussian Brigade, which had penetrated Tronville Wood and gained the ravine hemming it in on the east. Firing was kept up on both sides until the capture of Vionville, the enemy being unable, up to this point, to get farther than the ravine. But after the occupation of this village and the charge of the Prussian hussars, the adversary's battalions pushed forward to a position north of the high-road. This occurred at the time the Tixier Division came into line and moved to the edge of the wood southward of St.-Marcel. The Péchot Brigade, vigorously led, at once outflanked the left of the 6th German Infantry Division, and obliged

it to refuse a wing. Soon our progress became sensible, and the German left was not slow in falling back.

"The situation already began to grow difficult for the battalions of the 6th Division contending with the hostile forces deployed near the Roman road," says the German report. "Fresh troops appeared in great numbers to the north of St.-Marcel, making their way toward the left of the Prussian line of battle; the hostile artillery meanwhile sweeping the valley leading up toward Vionville."

At about 1 P. M., indeed, the situation began gradually to take a turn to our advantage.

The troops of the 2nd Corps that had quitted the theatre of combat to the east of Rezonville, had received orders to take post at Gravelotte and watch, toward the south, the outlets of the ravines. The Chasseur Battalion of the Guard was likewise directed to this side for the occupation of the Bois des Ognons.

On our right, the 3rd Corps was on its way to the field of battle. The Aymard Division approached (supported in rear by the Nayral Division) to the neighborhood of St.-Marcel. The Montaudon Division of the same corps was ordered up from Villers-aux-Bois to the posting-house at Gravelotte for the additional support of the left. The 4th Corps now came forward from its side, moving to our extreme right.

The Prussian left, sharply pressed by the 4th Regiment (Colonel Vincendon), had retired into the wood of Tronville. Upon the entire front of the line of battle, the enemy's fire seemed, at intervals, to betray signs of exhaustion. Marshal Canrobert resolved to assume the offensive, and throw himself upon Vionville. With this in view, he called into line, upon his left, the Levassor-Sorval Division.

The commander of the III. Prussian Corps, seeing the drooping condition of his troops, then asked the cavalry

supporting him in second line, to come forward to his aid and put a term to our progress. A brigade of cuirassiers and uhlans, concealed by the large hollow northward of Vionville, made an emphatic charge upon the batteries of the 6th Corps placed between the Lafont de Villiers and Levassor-Sorval Divisions, and reached our lines.

The Forton Division, impatient to retaliate, precipitated itself in turn upon these horsemen, took them in flank and rear, and threw them back upon Flavigny.

The commander of the 6th Corps was then desirous of resuming his offensive movement; but an order from Marshal Bazaine, who was persistently fearful for his left, obliged him to give up the design.

It was now 3 P. M. The scale of advantage seemed to be inclining in our favor. The exhaustion of the enemy was manifest; everywhere his fire was growing lax, and our right was gaining ground. The moment seemed now to have arrived for us to move forward and attack in our turn. But Marshal Bazaine, consulted on the subject, refused his assent. We thus renounced the favorable chances offered us, and preserved an attitude of passive defense. In the meanwhile the action continued to develop on our right.

Third Stage.—In this quarter, the Grenier Division of the 4th Corps had just passed St.-Marcel when it perceived a hostile cavalry brigade apparently in observation to the south of Bruville. Deploying at once, its skirmishers brought a searching fire to bear upon this force, and compelled it to recoil upon Tronville. The division then moved upon the wood of this name and the plateau to the west, by way of the ravines on the north. Before this attack, the enemy ceded, little by little, his points of shelter, and fell back as far as the approaches to the Mars-la-Tour road. Soon our soldiers debouched

to the west of the woods, and the 98th Regiment was sent to Greyère Farm, to cover the extreme right, while the Tixier Division crossed the Roman road, and took possession of the north-east section of the copses, supported by its batteries, which held under fire the valley to the north of Vionville.

The adversary's left was thus outflanked, then thrown back, and the supporting artillery also compelled to retire. The situation of the Germans began to grow critical. Their 24th Infantry Regiment, which at the outset had come into action against the Lafont de Villiers Division northward of Vionville, had been shorn of a third of its effectives. In one of the battalions, all the officers were *hors de combat.* Again, the 37th German Brigade had been driven to make a defensive organization of Tronville. Nevertheless, our troops were content to remain in their positions, with no thought even of pushing on to the southern edge of the wood of this name.

The conditions of the struggle at this period have been thus depicted by the Prussian general-staff:—

"The Brandenburg battalions, decimated by the long combat sustained, fell back toward the copse held by Lehmann's demi-brigade (37th). But when the latter had likewise fired its last cartridges at the pursuing enemy, the north-east angle of the wood had to be yielded, the defenders being pressed back into the interior with heavy losses. However, the wet ground, clothed with a thick undergrowth, impeded the enemy's progress. Although they were being outflanked from the west, the Prussian companies, turning every advantage to account, yielded ground only step by step. It was not until after an hour's fighting that the French succeeded in gaining a firm hold of the northern part of the wood, their artillery in the meantime sweeping the valley to the north of Vionville.

"Thus repulsed, the left of the Prussian fighting line

was afforded a rallying point by the artillery massed westward of Vionville.

"From their positions to the east of this village, the two horse batteries of the X. Corps had for some time assisted the efforts of the infantry against the Roman road; but on account of the very severe losses inflicted upon them, were obliged to temporarily withdraw.

"Meanwhile, the French artillery brought a powerful cross fire into play upon the four Prussian batteries established west of Vionville above the high-road. Exposed at the same time to the blows of the infantry stationed in the Tronville copses, and being almost out of ammunition, they were ordered to retire. This movement was executed in echelon to a position of readiness in rear of the heights south-west of Vionville.

"Up to this point the batteries posted south of the high-road had been somewhat withdrawn from the enemy's flanking fire. Now, however, these had to bear the brunt of an attack made by the French from three sides with very superior numbers. This artillery force was presently joined by another battery which had previously engaged against the adversary's guns in action toward the Roman road, and had been compelled to beat a retreat under heavy sacrifices.

"But here also (south of the high-road) the situation of affairs had become more and more critical. Three batteries of the Grenier Division had unlimbered upon the heights west of the Tronville copses, and their projectiles took in reverse the line of Prussian artillery in position on the high-road.

"During this time, the Prussian infantry effected a withdrawal from the Tronville copses, protected by the brave front shown by the artillery. The remnant of the four Brandenburg battalions assembled to the east of Tronville. But this resistance, obstinately prolonged for five hours, had cost the 24th Regiment 52 officers

and 1000 men ; in the Fusilier Battalion, all the officers were *hors-de-combat*, and the color-bearers had been twice shot down. The 2nd Battalion of the 20th Regiment suffered a proportionate reduction.

"The battalions of the 37th Demi-Brigade, which had also sustained severe losses, occupied Tronville, and put it in condition for defense.

"In view, however, of the evident preponderance of the French forces, their advance across the high-road might be expected at any moment." *

It was now 4 P. M. It seemed as if success, at this instant believed in by every one in our ranks, was about to be assured by a general movement toward the south or by the retreat of the enemy, when the heads of column of the X. Corps appeared upon the field. The 20th Prussian Division arrived, accompanied by a group of corps batteries, after a march of 28 miles. While on the way, the commander of this division, hearing the peal of cannon, dispatched officer-patrols in a northerly direction, and then deflected his troops from their prescribed course to hurry them on to the scene of the engagement. Sending forward a staff officer to reconnoitre [toward Tronville], he set out in person in the direction of Flavigny to inform himself upon what was passing in this quarter. After this survey of the situation, he moved a regiment to the support of the 5th Infantry Division, sent his batteries into action on the road to the west of Vionville, and pushed forward the rest of his troops toward the Tronville copses.

The entrance of these forces into line at once placed the batteries of the Grenier Division in a situation of inferiority, and they were compelled to retire to the north of the valley leading from St.-Marcel to Greyère

* *The Franco-German War*, by the Prussian General-Staff, 5th Section, pp. 568–69–70.

Farm. The enemy's shells then swept the Tronville copses and contributed to confine our skirmishers to the northern and western portions, while the infantry of the 20th Prussian Division entered these points of shelter from the south and east. Our regiments in this quarter were obliged to fall back before this counter-stroke. The Grenier Division was satisfied to remain in control of the plateau on the northern side of the valley and cover the copses with projectiles, thus preventing the 20th Division from issuing. The latter restricted its efforts to a re-occupation of the patches of ground just abandoned by us. A decided offensive on our part would no doubt have rendered this result impossible; but our right only had orders to hold its positions.

While these movements were in execution, the 38th Prussian Brigade, which from Suzemont had been directed upon Mars-la-Tour, arrived on a line with the latter village, and forthwith entered the fighting line, notwithstanding the fatigue of the men. Supported on the left by a battery, it advanced toward the valley north of Mars-la-Tour. Owing to the protection afforded by the Tronville copses, it was able to reach and cross this strip of land and take post on the edge of the plateau.

At this juncture, the Cissey Division of the Ladmirault Corps began to deploy between the Grenier Division and Greyère Farm. At sight of the enemy, it dashed upon him at double time.

"The struggle," says the German account, "rages for but a few brief moments, when the retreat has to be sounded, first by the 16th Regiment. The remains of our brave battalions recoil into the valley beneath; the adversary, pressing forward to the crest, delivers a crushing fire which increases their losses almost to the point of annihilation."

"This terrible engagement succeeding an uninter-

rupted march of 28 miles, the strength of many now failed. Upwards of 300 men, unable to re-ascend the steep slope of the ravine, fell into the hands of the enemy."

The troops of the Cissey Division, continuing their impetuous course, descended into the valley in the wake of the Prussians. A furious combat took place at the bottom; the enemy's force was crushed, and only remnants succeeded in regaining the opposite plateau. A flag was captured by Ensign Chabal of the 57th Regiment, which he carried back with him to Metz.*

After this success, our forces gained ground to the south of the valley, and the Grenier Division partially followed the movement.

The day wore on. It was now nearly 6 o'clock. On our left, every effort of the adversary had been repulsed, and since the taking of Flavigny, he had not been able to make any headway in this quarter. On our right, the Péchot Brigade, and afterwards the Grenier and Cissey Divisions, had one after another gained substantial advantages, which unfortunately were not followed up. In a word, toward 6 P. M. the German left was broken. General Voigts-Rhetz, forced to recognize the dangers of the situation, rallied the *débris* of his 38th Brigade at Tronville, and directed the 5th Cavalry Division as well as the Cuirassier Brigade of the Guard, to charge home.

The duty of the Prussian cavalry was "to dedicate itself to the rescue of its endangered brothers in arms."

This mounted force, previously assembled on the approaches to Tronville, was forthwith launched upon the flank of the skirmishers of the Cissey Division. These

*Out of 95 officers and 4,546 men which the 5 Prussian battalions counted at the commencement of this attack, 72 officers and 2,542 men were rendered *hors de combat* by our troops, and 400 unwounded prisoners fell into our hands.

checked the career of the first advancing squadrons. But, in a second charge, our lines were reached, and a furious contest took place between our foot-soldiers and the Prussian horsemen. The latter were repulsed with heavy losses. But, frustrated by this counter-offensive, stormed at with canister by the batteries placed at the south-west angle of the wood, taken in flank by another battery which had just come into action north-west of Mars-la-Tour, menaced by six regiments of cavalry massed between this village and Greyère Farm, without orders moreover to push on, our troops returned to the other side of the valley.

General Ladmirault, concerned over what was taking place on his right, moved forward from this side the Legrand Cavalry Division, the Lancer Brigade, the Dragoon Brigade of the Guard (General De France), and the 2nd Chasseurs d'Afrique of the Du Barail Division. In rear, at Bruville, two brigades of the Clérambault Division were held in support.

Seeing the retrograde movement of his skirmishers, General Ladmirault directed his cavalry to clear the ground to the west of Greyère Farm. The 2nd Chasseurs d'Afrique (Colonel De Lajaille) advanced first, falling upon a Prussian battery, sabring its gunners, and casting it upon Mars-La-Tour, together with a squadron which had come to its aid. Charged in turn by a regiment of Prussian dragoons, the chasseurs were driven back; but at sight of the Legrand Division and the De France Brigade formed to the south of the wood of Greyère, the hostile squadrons stopped in their career, and then retired.

The entire disposable Prussian cavalry was in the meanwhile massed upon the approaches to Mars-la-Tour, prepared to resist the shock of our horsemen.

We had then between the wood of Greyère and the farmstead of this name, 24 squadrons, 20 of which were

ready for the onset. The enemy counted 21 squadrons, 20 of them still intact.

General Montaigu, putting himself at the head of the 2nd and 7th Hussars, bore down upon the 5 squadrons of Prussian dragoons in his front, and broke through their line; but 3 squadrons of hussars now assailing him in turn, a terrible hand-to-hand conflict ensued, during which the remaining 13 Prussian squadrons deployed on our right. General Legrand darted upon them with 8 squadrons.

"The two lines of cavalry," says the Prussian account, "throughout their entire length, fall upon each other with the greatest violence. Victors at one point, themselves broken through at another, the squadrons of each side endeavor to gain the adversary's flank. A thick cloud of dust soon arises and envelops this surging mass of more than 5,000 combating horsemen."

Unfortunately, after a short interval, we lost General Montaigu, who fell into the enemy's hands badly wounded; and General Legrand, while at the head of his troops, received a mortal blow. The 12 squadrons of his division were at this time contending alone against the 21 Prussian squadrons. In the end they were recalled. The De France Brigade now engaged in turn; but attacked in front and flank by superior numbers, it saw that further resistance here was useless, and followed to the rear the horsemen of the 4th Corps, who were regaining, toward the north, the valley near Greyère Farm.

The 2d Chasseurs d' Afrique in vain essayed to dash the ardor of the Prussian regiments.

There yet remained the Clérambault Division, which now advanced. But its 1st Brigade (Bruchard), hampered in its movement by groups of the Legraud Division, and finally confounded with them, was borne away in the receding stream before striking a blow. Its 2d

Brigade (De Maubranches) alone succeeded in effecting a deployment to the east of the Greyère ravine, and moved to the support of the skirmishers of the 98th Regiment occupying the farm of this name. The fire here sufficed to check the onward rush of the enemy's squadrons, which retired at first to the plateau of Ville-sur-Yron and thence upon Mars-la-Tour.

IV.—End of the Battle. (*See Plate XVI.*)

The approach of night put an end to this fierce struggle. Compelled by the efforts of the Cissey Division, the 38th Prussian Brigade fell back beyond Tronville. This movement in retreat led to the retirement of the troops of the 20th Division stationed on its right. These also made their way to Tronville, abandoning the wood of this name. We, however, took possession of only the northern part.

General Voigts-Rhetz, not being able to maintain himself in his positions, had, then, led back to the south of the high-road his 20th Division, his 38th Brigade, his corps artillery, and the cavalry which had fought upon his left; his 37th Brigade was already posted in that quarter.*

It was only during the night that the 20th Prussian Division resumed occupation, by its outposts, of the parts of the Tronville copses which we had neglected to seize.

On our right, consequently, the battle terminated by the retreat of the X. Prussian Corps.

On the other flank, in front of the 2nd Corps, and the Grenadiers of the Guard, the Germans contented them-

*The X. Corps was established in two lines between Tronville and the road from Mars-la-Tour to Buxières; the 37th and 38th Brigades, the most roughly handled in the action, were placed in second line.—[Maj. Hofbauer.

selves, up to 5 P. M., with maintaining a stationary combat. Notwithstanding the evident superiority of their field-guns, the fire of our infantry had been equal to the task of bridling all progress on their part in the section southward of the road from Mars-la-Tour to Rezonville. More than once, moreover, signs of exhaustion manifested themselves on their side, and their fire sensibly relaxed; at such intervals, a long line of guns seemed alone to keep up the action.

More than once, also, our troops had asked if the charge was not to be sounded and the offensive seized; but no order was given, no general movement in this sense was attempted. The attitude of the German army opposite our left has been explained by the Prussian staff in these terms:—

"In front of the Prussian forces, the French held the gently-sloping heights round Rezonville. The positions occupied by both combatants being defended by infantry armed with breech-loading muskets, were so strong as, to all appearances, to defy a direct assault. *For very circuitous turning movements*, however, the Prussians lacked the requisite forces; while the French commander-in-chief, as already mentioned, considering that the prime object to be kept in view was the security of his communications with Metz from all flanking strokes, refrained from employing his numerous reserves for a decisive attack against the Prussian left.

"From the north-west angle of the Bois de Vionville, Prince Frederick Charles surveyed the field of battle, and at once recognized that in his right wing all that was requisite was to firmly maintain the ground already occupied."

The enemy, however, had received reinforcements upon his right, as well as upon his other flank. At 3:30, his 16th Division debouched to the north of Gorze. At 5 o'clock, it gave impulse to the action on the north-

ern edge of the Bois de St.-Arnould, and pressed an attack against the Lapasset Brigade. The latter, ably commanded, and supported by the troops of the Guard, redoubled the intensity of its fire, and, in less than half an hour, forced the assailant back into the wood.

The enemy determined then to advance the rest of his columns. The colonel to whom request was made to come forward into line, had, however, just received orders from his corps commander to lead his troops back to their old bivouacs. Yet, shaping his course according to Prussian usage, he took into account only the request for aid, and marched in the direction of the cannonading. A second attack was immediately directed along the ravines against our left. It failed like the first before the attitude of our infantry, and from this time the enemy was obliged to content himself with keeping up a steady rifle fire from the border of the wood, the possession of which we did not attempt to dispute with him.

Toward 7:30, however, fresh forces essayed to debouch on the right of the 16th Division by La Jurée ravine and the Bois des Ognons. These were the advanced troops of the IX. Prussian Corps. Our reserves had already fallen back to their bivouacs. The left of the Montaudon Division was intrusted with the duty of facing this assault, which is to be registered in the catalogue of failures with the previous attacks.

It was 8 o'clock; darkness was settling upon the field, and the strife seemed at an end, when the roar of cannon burst forth anew opposite our front.

The chief of the II. Prussian Army, who had not reached the scene of conflict until 4 o'clock, hearing the fusillade toward the east, and reckoning upon the support of the IX. Corps, without, however, sufficiently considering the exhausted state of his troops, thought to make a decisive assault against our lines. His artil-

lery, brought into action upon the centre of his positions, was alone in condition to attempt the execution of the offensive design. General Bourbaki, assembling 54 guns of the artillery of the Guard to the south of Rezonville, was able, aided by the fire of our skirmishers, to curb the enemy's forward movement. Presently the assailant fell back.

While he was experiencing this check upon the lines in his immediate front, Prince Frederick Charles received word that his left was totally unable to take the offensive, accompanied, however, by the assurance that it would maintain its position at Tronville to the last extremity.

Far from being prepared for a decisive stroke, the leader of the Prussian army had grounds for fearing a general offensive on our part. To forestall this, he made demand upon his cavalry for a last sacrifice. Upon his order, the 6th Cavalry Division charged in the direction of Rezonville. But its ardor was stifled by the bullets projected upon it by the Guard and the 6th Corps. It lost its two generals, was repulsed, and cast back in disorder upon Vionville.

The success here on the part of our infantry, was the last act of this bloody day. It was 9 o'clock; night had come upon the combatants, and on both sides the action ceased.

The enemy bivouacked southward of the Mars-la-Tour road, his line of outposts extending from the Bois des Ognons to a point south of the Bois de Tronville.

Our troops remained in their combat positions.

V.—Comments.

1ST.—LOSSES.

The losses were correspondent to the fury of the struggle. They reached, on our side :—

837 officers and 16,193 men, killed, wounded, and missing.

Generals Legrand, Brayer, and Marguenat were killed ; and Generals Bataille, Letellier-Valazé, and Montaigu, wounded.

On the Prussian side :—

711 officers and 15,079 rank and file killed, wounded, and missing.

The proportionate casualties in the various bodies were :—

For the 1st Corps (Frossard)	20.8 pr. ct.
For the 6th Corps (Canrobert)	18 " "
For the other forces	2 to 9 " "
For the III. Prussian Corps	21.5 " "
" " X. " "	10.5 " "

2ND.—EFFECTIVES.

We have already seen that up to the taking of Vionville and Flavigny, the two contending forces were nearly equal. However, there existed on the side of the Germans a slight overbalance in infantry and a marked advantage in point of artillery.

In the afternoon, upon our right, these conditions were reversed. The 38th Prussian Brigade, about 6,000 strong, confronted our Cissey Division, which numbered 9,800 men and was supported on the right by the Grenier Division. We had a substantial superiority in this quarter and the enemy was overwhelmed. The forces engaged at the close of the action may be set down as follow :—

GERMANS.

III. Corps, less 3 battalions and a squadron	31,850 men.*
X. Corps (entire)	35,000 "
5th Cavalry Division	5,600 "
6th " "	3,200 "
16th Infantry Division	15,000 "
IX. Corps (3 regiments and a battery)	9,100 "
1st Cavalry Brigade of the Guard and a battery	1,300 "
Total	101,050 men.

These 101,000 men were supported by 222 guns.

FRENCH.

2nd Corps, less the Laveaucoupet Division	25,400 men.
3rd Corps, less the Metman Division	33,300 "
4th Corps, less the Lorencez Division	22,300 "
6th Corps	31,400 "
Imperial Guard	21,000 "
1st Reserve Cavalry Division	800 "
3rd " " "	2,700 "
Total	136,900 men.

Of this force we had left in reserve, without actually making use of them for combat purposes, two and a half divisions of the 3rd Corps, and the Voltigeurs of the Guard,—about 28,000 men.

The artillery at our disposal comprised 364 field pieces and 66 mitrailleuses.

In general, then, we had in hand an incontestable numerical superiority; and if, under these circumstances, the success of our arms was not more decisive, the reason lay with questions which it would be difficult to connect with purely military considerations.

The council of war assembled at Versailles in 1873, was called upon to pronounce on this matter, and its judgment is authoritative; it is therefore useless to again

*The German forces are given in *rationnaires*,—the only means of comparing them with ours.

review the subject. But in its tactical and strategical bearing, the battle of Rezonville remains one of the great events of this campaign, and contains numerous lessons of experience whose importance entitles them to a consideration here.

3RD.—CAUSES OF THE BATTLE.

The action was primarily due to the firmly-fixed resolution of the chiefs of the German armies to prevent the junction of the Army of Metz with the group of forces gathering at Châlons. The object for which it was fought was then to keep up the separation of our two masses, and to cut the communications of the one found at Metz.

This conception was in conformity with principles. It remains to examine in what measure the proposed result was attained.

It is to be observed that all the Prussian officers shared this resolution. The leaders were certain then of seeing brought to bear in the execution, throughout all the degrees of the hierarchy, an ardor, devotion, and spirit of concert, which became powerful elements in determining success.

Among the causes of this battle, it is essential to include the extraordinary initiative which the Prussian generals were accustomed to exercise. It has already been seen that once the aim of the movements was known, they never hesitated to engage their forces fully and with the greatest possible energy, freely assuming all responsibility. Witness those colonels who, notwithstanding contrary orders, took the sound of the cannon on the fighting line for their guide, and led efficient succor to their struggling companions-in-arms.

The weakness of our combinations also contributed to bring about the engagement we are considering. The defects in our plan of march from Metz upon Mars-la-

Tour have already been pointed out. They were suddenly aggravated by the resolution formed by Marshal Bazaine, on the morning of the 16th, to remain at Gravelotte until some time in the afternoon, and to spend the whole day in the positions then occupied, in case the enemy was not in proximity.

Now the army being in retreat, should have made its way to the rear with the greatest possible dispatch. This obligation becomes the more evident upon considering that intelligence had been received of the presence of a hostile mass of 30,000 men on our left.

There was no doubt in this regard, and a *rencontre* with the German forces must have appeared the most probable consequence of the arrested movement of our corps.

4TH.—STRATEGIC RESULTS.

The Prussian staff has estimated these results thus:—

"Up to evening, victory hung in the balance; for, if the Germans were unsuccessful in the attempts made to dislodge from their positions the more than two-fold superior forces of the French, just as little did the latter succeed in regaining the ground lost during the morning, and in recovering their line of march through Mars-la-Tour.

"The true importance of the action does not therefore reside in the tactical results reached. On neither side was there an immediate reaping of the advantages gained; for, as the day closed, neither of the opposing forces was able to move a step beyond the theatre of action. Darkness put an end to the struggle. The following morning showed the Germans in possession of the battle-field, and the abandonment of their positions by the French." *

**The Franco-German War*, 5th Section, p. 614.

Further on, the Prussian official account says:—

"While the two belligerents during the battle of Colombey (Borny) were established upon fronts corresponding in direction to their natural communications, an almost opposite state of affairs had supervened as early as the forenoon of August 16. During the course of the action on this day, the normal condition was partially restored when the 3d and 4th Corps, wheeling toward the south in the afternoon, took up ground in front of the X. Prussian Corps from which they could not be dislodged. But as yet the army of the enemy had resumed its connection with the capital and the interior of the country solely by its right; and in order to assure free use of its natural communications, in view of the position of the Germans, a renewal of the engagement was necessary."

It is difficult to form a correct estimate of the results of the battle of August 16, considering it apart from the events with which it was so intimately associated. From a strategic standpoint, it was the second act in the operation commenced by the Germans on August 14 at Borny, and which was to terminate on the 18th at St.-Privat. Was this combination clear to the mind of Marshal Bazaine at the time? It is almost impossible to say. But one thing however is certain,—that the battle of August 16, keeping in view the *ensemble* of German operations at this period, had a special aim, which was to bar our rearward movement upon Verdun.

Was this end attained? Such, in its simplest form, is the question that we are interested in putting to ourselves.

In order to fittingly reply, we must bear in mind that the presence of Prussian forces between Mars-la-Tour and Tronville during the night of the 16th prevented us from continuing along the Mars-la-Tour road except at the price of a second battle.

This situation was the consequence of the fact that our army had not striven at the final stage of the action on the 16th to render its success decisive. But other lines of retreat were open to it. It still controlled the system of roads running from Metz upon Étain by way of Conflans and Briey. On this side, a march of 12½ miles would have been sufficient to disengage it.

Again, the Prussian troops assembled on the evening of the 16th around Tronville were not in condition to attempt the least enterprise against our flanks or rear. By falling upon them at daybreak on the 17th with the still intact French divisions, we would have been certain of finding the ground clear as far as Étain, and consequently to the Meuse.

Therefore, if the Prussians had deprived us of the free use of the Mars-la-Tour road, *they had not succeeded in intercepting our retreat upon the Meuse.*

From this point of view, the result contemplated had not been secured, and a fresh engagement was required to make good their enterprise. The action of St.-Privat makes this evident.

What, on our side, was the strategic aim of the operations? Information published since the occurrences, as a result of official inquiry into the conduct of the war, has brought the matter into sufficiently clear relief. Marshal Bazaine set his army in motion upon Verdun solely in obedience to the will of his sovereign. As soon as the latter had taken his departure, the Marshal's idea was to hold his forces well in hand around Metz and await events. The solemn judgment pronounced at Versailles does not permit us to entertain two opinions in this connection.

The combination proposed by the Marshal was far from being conformable to strategic rules; and in face of a skillful adversary, could lead but to disaster.

We observe that on August 16, the French army re-

ceived but a single order,—to maintain itself in its positions. This it executed without difficulty; but it would have won to its side more decisive results if such had been demanded of it.

It is then especially the tactical aspect of the question that should constitute the real subject of our study.

5TH.—TACTICAL RESULTS.

Tactical Character of the Battle.—The conflict at Rezonville was in every sense a battle of *rencontre*. Unexpected by the Prussians, who supposed us already near the Meuse, and who looked upon the approaching collision as but a rear-guard affair, it was not less unanticipated by us, who were not very well informed as to what was passing with the enemy. The action moreover took on a tactical character which it is important to define.

On our side, by virtue of the orders given by Marshal Bazaine, who wished simply to maintain his positions, this character was one of passive defense, the worst of all combinations.

With the enemy, it was on the contrary one of offense, energetic, determined, incessantly renewed, always prepared and supported by artillery of superior range.

More than once, this offensive had occasioned illusions regarding the strength of our adversaries and served to conceal their weakness. This feature, alike practical and favorable to the *morale* of the troops, merits more extended remark.

On the morning of the 16th, indeed, when the Prussian cavalry was endeavoring to reconnoitre our forces, it attacked them with its accompanying artillery. As soon as the advanced-guard of the 5th Prussian Division arrived upon the ground, it entered into full action against our 2nd Corps; and the 6th Division, on coming

up, did likewise. Upon perceiving that we had two *points d'appui* on our front, these masses forthwith concentrated their efforts against them, restricting themselves to a mere stationary contest elsewhere. They thus found the means of bringing a numerical superiority to bear upon the point of attack and thereby succeeded in seizing it.

The 38th Prussian Brigade likewise took the offensive immediately upon coming into line, without holding any account of the strength of the forces in its front. This offensive cost it dear, it is true, but the artillery and cavalry were able to come to its aid, which they failed not to do.

At the close of the day, when the Prussians, now exhausted, and being under the impression that we were about to make a last effort to render success decisive, wished to frustrate our design, they again seized the offensive.

This was the true combat tactics in former times, and it is equally so to-day, on condition, however, that the artillery opens the engagement and concentrates its fire upon the points to be carried.

The idea especially exemplified by the battle of Rezonville, and which no other contest sets in clearer relief, is that the passive defence of a position is absolutely contrary to the principle that success should, at any cost, be followed up with unqualified fury and determination. Napoleon defined it thus: *To bear off the honors of the action.*

At Rezonville, several of our regiments were very sorely tried. The 9th Battalion *Chasseurs à Pied*, of the Péchot Brigade, out of 23 officers and 750 men, suffered a loss in killed and wounded of 10 officers and 156 men.

Out of 65 officers and 2,200 men composing the 12th Regiment of the Line, of the same brigade, 25 officers and 655 men were *hors de combat.*

In the 9th of the Line, 23 officers were killed or wounded out of 49.

In the 93rd, Colonel Ganzin, 27 officers out of 66, and 614 rank and file out of 2,200, were *hors de combat.*

The other regiments had sustained similar losses. But however great these sacrifices appear, a force that wishes to succeed must be ready to submit to still greater ones.

Yet some of these regiments took part in the action of the 18th with as much steadiness and energy as if their *cadres* were complete. The 93rd, for example, suffered a further loss at St.-Privat of 18 officers and 518 men. Thus in the two engagements this regiment was stripped of 45 officers out of 66 and 1,132 men out of 2,200.*

Were not such troops in condition to take the offensive at the first signal from their leaders?

Employment of the Different Arms.—One general fact stands forth prominently in this battle—*the fire of the Prussian artillery dominated ours*, notwithstanding the numerical preponderance of our guns, obliged our infantry to evacuate its points of shelter on the combat front, and in almost all cases broke the force of its offensive attempts.

On the other hand, the deadly effects of our musketry fire often prevented the German artillery from deploying or taking position, and inhibited the offensive action of the hostile infantry beyond its points of cover.

In this connection, it cannot be denied that the Chassepot assured us a tactical advantage, in the same way that a feature of superiority was enlisted on the side of the Germans by the employment of breech-loading steel cannon. The consequences of the im-

* These figures are taken from the history of the 93rd Regiment.

provement and use of these weapons were, in this engagement, clearly displayed on ground favorable to fire action; but they have already been set forth in connection with the account of the battle of Fröschwiller; it will therefore be sufficient to present them here in brief outline.

Infantry.—The incidents of this struggle bring to view the advantages of rapid fire at long range, and of volleys upon shaken troops, and upon intact masses at close quarters. Often, indeed, our infantry had thus arrested each of the other arms. But it was clear that this gain was offset by the inconveniences resulting from a waste of ammunition; and the necessity therefore arose of inaugurating a better devised system of fire instruction and a stronger and more rigorous fire discipline.

Again, the combat method of the German infantry denoted a habit of making use of shelter,—a custom which was completely lacking on our side. The advantages our adversaries were able to draw from this were remarkable; and the results obtained proved that thenceforth, in presence of modern arms, the only course to adopt in attempting to gain ground exposed to the enemy's fire, would be to advance from shelter to shelter, whether on the front or flank, under the protection of the artillery, but without pausing or turning back, until the hostile forces should be thrown into confusion or vanquished.

From this arise greater difficulties for the chiefs of the small units, who ought more than ever to have the direction of affairs among their own troops, consequently to be allowed, at any cost, proper independence and discretionary power.

This method of employing shelter suggests still other reflections. The Prussian battle front was strengthened, indeed, on the right, by the woods of Vionville and

St.-Arnould; in the centre, by the villages of Vionville and Flavigny, the intermediate clump of trees and that to the south of the Bois de Tronville; while the left rested on the village of Mars-la-Tour. Our fighting line, on the contrary, deprived towards noon of the points of support possessed at the outset, held only patches in the northern part of the Bois de Tronville.

This condition of affairs placed us at a tactical disadvantage, of which we did not at first, perhaps, seize the full scope, but which the progress of the strife rendered evident.

We are hence impressed by the fact that for the future there is every necessity of adopting special tactical rules to correspond to the effects of the arms in use, and of acquiring a new practice in dealing with the features of the *terrain.*

Cavalry.—The battle of Rezonville offered exceptional opportunities for experimenting upon the employment of this arm under the most varied conditions. From a combat point of view, in particular, the struggle which took place on our right was the most imposing of the entire campaign.

In general, this action proved that the influence of shock in combats was not in keeping with the destructive effects of modern arms; that cavalry charges were powerless to destroy the cohesion of infantry, the fire of skirmishers being of itself sufficient to break their force; that this arm could still retard an offensive movement, but at the price of heavy sacrifices, and, on the whole, to obtain only inconsiderable results.

The success of the charge is now, as formerly, a question of opportunity, courage, energy, tenacity, and especially of reserves in readiness to engage. But the real value of this arm no longer resides in its actual influence in contests on the battle-field; its most useful mode of

employment will be, in conjunction with the artillery, in reconnoitring the enemy, both before and during an engagement.

Artillery.—At Rezonville, as at Fröschwiller, it was the artillery that acquired the most importance. On the side of the Germans, the batteries constantly preceded the infantry into action, prepared all the attacks, supported all changes of position, defined the lines of battle, and kept up the contest when its vigor showed signs of abating.

The effect of the increased range and precision of breech-loading cannon became then an added factor in tactical combinations. These guns were able, single-handed, to contend with success against the destructive blows of the infantry.

There hence results the necessity:—

1st.—Of employing the artillery in masses at the beginning of the engagement.

2nd.—Of giving it a new place in the column of march, in order to attain this end.

3rd.—Of concentrating its fire against all efforts of the enemy that are to be broken down and all points to be brought under control: *i. e.*, the deployment of hostile batteries; the advance of masses of hostile infantry; the adversary's means of shelter, which are to be destroyed or rendered untenable; etc.

4th.—Of making provision beforehand for an excessive consumption of ammunition, by introducing the necessary supplies into the column of march immediately after the combat troops.

Finally, the incontestable advantage assured to troops by an immediate employment of all their artillery, will, in future, diminish the utility of reserves of this arm.

In reality, it is to the Prussian artillery,—to the concentration of its fire, and to the potency of its effects,—

as well as to the infantry mass moved first upon Vionville and then upon Flavigny, that we must attribute our loss of these positions.

It was also the Prussian batteries which, opposite our right, shook the ardor of General Cissey's soldiers before they were charged by cavalry.

6TH.—CONCLUSIONS.

In terminating these considerations, it is permissible to ask if the battle of Rezonville should have been fought as it was.

The Prussians wished to execute an offensive reconnaissance in force. Under these circumstances should they not have foreseen the possibility of a battle, and disposed their corps within less than a day's march of the Metz-Verdun road?

On the other hand, what was the duty of the French army in the premises? It was aware, from the 15th, that a mass of 30,000 men was approaching its left. It could not hope then to continue its march toward the west until having beaten this force. This is an elementary rule for the conduct of retreats. It was, in consequence, essential for it to hasten the arrival of all the corps upon the plateaus, to select a field of combat, form line faced toward the south, and adopt a defensive front commanding all the *débouchés* of the Moselle. In the latter respect, that one should no doubt have been chosen which best responded to the tactical idea of permitting the enemy to be thrown back into the ravines and upon the Moselle. The army, being concentrated on the evening of the 15th, would then have taken the offensive with its entire forces and attacked the enemy at all points with the greatest energy.

We should then have had a foreseen battle. But at 10 A. M. on the 16th, in the midst of circumstances resulting from chance, should our army have made the dispositions that were actually adopted?

Here, the obligation to first of all inform ourselves upon the left, even to the points of contact with the enemy's masses, was apparent. This done, there remained the question of the proper occupation of the *terrain* in view of an attack coming from this direction.

Now, the Flavigny and Tronville heights were controlling features in this theatre of action. They alone presented shelter, pronounced undulations, and advantageous positions. It was necessary therefore to endeavor to occupy them at once, and then to gain ground to the right for the purpose of rendering their possession secure. To this end it was essential to move the 2nd Corps to Mars-la-Tour, and deploy it, faced to the left; to establish the 6th in contiguity with it, upon the lower border of the Bois de Tronville, as well as at Vionville and Flavigny, and form a line of battle fronting southward. The forces in rear would thus have had less distance to travel in order to come into line. But for such measures, a will was necessary,—a determination to conquer; and who among our adversaries or our companions-in-arms can say to-day that such a will existed?

§4.—NORMAL TYPE OF BATTLES OF *RENCONTRE*.

It would be impossible to establish rules for the development of a fact that owes its existence entirely to chance. However, the chance that we are here considering is not absolute; it is the result of certain combinations; it is the product of the activity of two wills,—that of the offensive, in search of the enemy's army, and that of the defensive, engaged in carrying out its own plans. Whence rencontres which, while their incidents may be unforeseen, are none the less sought by one side, and looked upon by the other as probable occurrences.

How are these battles of *rencontre* usually fought to an issue with the arms and tactical methods in vogue to-day? This is the question which presents itself when one has followed the sinuosities of such an engagement.

The battles of Rezonville and Fröschwiller are in this regard events whose episodes permit us to form an idea of the ordinary development of this species of action.

The adversary assuming the offensive knows that the opposing forces are near. He is ignorant of their exact whereabouts, but he suspects their presence on his front or on one of his flanks. With him, march directions have been adopted which should put him in condition to attack in the most advantageous manner; that is, which should give him in hand the greatest possible number of combatants under circumstances permitting the hostile communications to be threatened.

The reconnoitring cavalry has received instructions which should lead to a clearing up of the situation within twenty-four hours.

Turning to the other side, the principal force of the defensive takes up a position and calls to it the remaining bodies; or, again all the various parts execute a movement of concentration. In the first case, the army is covered by outposts, and an action taking place becomes for its pre-arranged battle.

It is then the second hypothesis that gives rise to a rencontre proper. In these operations the manœuvring army is, like the opposing force, protected by its reconnoitring squadrons. But as a necessary consequence of the strategic conditions of the situation, those of the defensive are nearer the main masses than is the case with the adversary's cavalry,—a first disadvantage which adds to the inconveniences of the defensive, and which is one of the results of the timid dispositions it has been led to adopt.

Prelude to the Battle.—At break of day, consequently at an earlier hour than usual, the cavalry divisions of both parties are put in march. At the end of a short hour, the sound of cannon becomes audible. The old soldiers have not been mistaken; for some days they have felt

that a combat was imminent; now they are certain;—the battle is about to open.

However, the noise subsides and the first reports are awaited. While they are coming in, the boom of the cannon breaks forth afresh. Immediately the decision of the chief is taken. He sets off for the front with his staff, while the troops continue their march at a more rapid pace, feverishly pushing forward under the influence of the drama now preparing.

Upon reaching the scene of the engagement, the corps commander, who has outstripped his main columns, perceives masses of cavalry echeloned at a distance, and covered by two or three batteries, which are replying to the opposing artillery. For him, there is no room for doubt respecting the true state of affairs: this is the reconnoitring cavalry of the wing of an army or of an entire army. The principal masses cannot be far behind. Soon he distinguishes lines in movement, which accidents of the ground now and then conceal from view.

An officer immediately sets off to notify the advanced-guard to quicken its march, sometimes even to push forward its artillery. Meanwhile the enemy's guns are increasing; new pieces are taking position beside those that first came into action. In a few minutes the fire of musketry bursts forth from a wood to the rear of these batteries; it is delivered by the head of the hostile advanced-guard, which has seized this point of shelter, and is endeavoring to debouch from it.

But the infantry of the other side arrives at the same instant, and its foremost skirmishers, coming into line at the double, stay the progress of the adversary, and confine him to the skirts of the wood. Both contesting forces have now assumed combat formations and deployed,—skirmishers in front, supports and reserves in rear. The first points of shelter are reached; ravines offering a shield against the enemy's projectiles are util-

ized in moving forward; soon inclosure walls of farms and villages are alive with the fire of infantry; the batteries meantime grow in number; the cavalry masses move off and manœuvre at a distance; the cracking of the musketry and the thunder of the artillery acquire a deafening intensity along the entire line, which has now become so extended that its extremities are no longer visible. The action has become general: the preliminaries are concluded; the battle of *rencontre* has now fully opened. As in premeditated battles, the first act has, then, the character of an offensive reconnaissance.

Development of the Action.—The generals-in-chief have been apprised as soon as the affair has assumed a definite shape, and each setting out forthwith for the scene of combat, endeavors to gain a high point whence he may distinguish the main features of the operations now under way, and give a favorable direction to the movements of his forces.

The troops making the opening efforts soon, on both sides, reach the maximum of destructive effect; the contest is maintained with vigor; the artillery groups reply to each other, blow on blow; the masses come successively into line, and the primary thought of the chiefs is the occupation, upon the flank of the engaged troops, of the accidents of the ground affording shelter.

At this moment, isolated efforts, local combats, constitute the order of events upon the front of each corps. In most instances these escape the notice of the general-in-chief, and their success is dependent on the tactical measures originated on the spot. However violent the combat may be at this juncture, it has but a single aim —to seize one of the enemy's points of support, to overmaster him at one part of his line. This result will often be independent of the dispositions of the general-in-chief, and rest entirely with the officer commanding at the particular locality. In this connection, the artil-

lery is alone able to-day to assure one of the adversaries an effective superiority upon any given point of the battle-field. The infantry can arrive at decisive results only when this sister arm has prepared the way, and almost destroyed the tactical cohesion of the adversary.

The influence of these partial contests upon batle-fields with a front of from 8 to 9 miles, cannot diminish the sway of the decision formed by the general-in-chief, when, after choosing his principal objective, he prescribes to his masses the general movements which are to effectuate the final aim of the battle.

Thus at Fröschwiller, the Crown Prince of Prussia, arriving upon the scene at 1 o'clock, indicated the capture of this village and Elsasshausen as the object to be attained, and pointed out the necessity of outflanking our right. Likewise, at St.-Privat, the Prussian orders specified our right wing as the one against which the decisive blows were to be struck, and enjoined the turning movement executed by the Saxons.

Again, at Rezonville, the success of the battle depended upon the possession of the Bois de Tronville and the villages to the south. In this respect the decisions to be arrived at on the part of the generals-in-chief are the same as formerly. They must discern the decisive point and the means of seizing it. The difference consists in the fact that the increased dimensions of battle-fields in recent times will not permit them to perceive it as readily and clearly as heretofore.

At all events, this is the essential aim of the development of the contest. It is a question of distinguishing the portion of the field constituting the key to the defensive position, and of preparing for its seizure by a concentration of efforts superior to those the enemy is able to bring to bear.

In this part of the struggle the predominating rôle is played by the artillery: witness the power of its fire;

the effects produced by a great number of pieces, especially the crushing action of these when assembled in grand batteries; the influence of its oblique strokes! The contest of guns succeeds, then, the precursory operations, and forms the principal feature in the development of the engagement.

But soon a change occurs in the character of the strife. The infantry has taken its positions throughout the entire combat front. In 1870 we still beheld long lines of skirmishers arrayed at a distance of 300 or 400 yards from the field-guns, who thus added the destructive effects of their fire to the influence of the artillery. The improvements that have since been made in arms, will however render such deployments of skirmishers more difficult in future, and this difficulty will increase directly with the extent of improvement. At the most murderous stages of the combat, the troops can no longer remain without cover, and success will incline to the side of the party that is the better provided in this respect. This advantage will enable it to overwhelm its adversary and break the force of his blows, while permitting it to await the preparation of the attack by its artillery.

A moment arrives, indeed, when all the ordered dispositions for the storming of the decisive point have been made. The reserves are massed behind the villages or in the valleys previously indicated to them; the troops charged with the flanking movement have reached the localities upon which they were directed; the artillery groups designed to give superiority to the efforts of the offensive, have been moved to their combat posts.

A new operation, which is not however the decisive act, now commences. This is the main attack. Upon the other portions of the front, the troops will restrict themselves to keeping up the contest, preventing all progress on the part of the enemy, and gaining all ad-

vantageous points of the *terrain* which his weakness or the mistakes he may commit, will permit them to occupy. But upon the portion of the field which is to be the theatre of the principal attack, the action should be more pronounced. The artillery masses brought together on this side, are soon to open a converging fire upon the points covering the approaches to the decisive position.

The enemy has likewise concentrated in this quarter all the defensive resources at disposal; and at the initial period in the advance the offensive will, before an energetic adversary, seem powerless in its efforts to make progress. Yet if it perfectly appreciates the value of limiting its endeavors to a determinate point, making its blows follow a logical course, overwhelming with its fire, at the outset, the shelter sites which serve as approaches to the position or which will permit one of the flanks of the line to be threatened, should the front be too strong,—if, in a word, it proceeds as in case of a siege, by trying to master, at first, each of the points protecting and covering the enemy,—a moment will arrive when the cohesion of the defense will be shivered and the moral force of its troops destroyed. At this stage nothing remains but to make the assault, to sound the charge, and launch forward the groups which are to accomplish the decisive act.

Here the preponderating rôle again falls to the infantry. To it belongs the honor both of assuring the victory, and of submitting to most bloody losses at the moment of supreme crisis. From this period to the end of the battle, the action will in general be similar to that characterizing the closing scene of an offensive combat. The episodes will be the same, the direction given the efforts will also be identical and lead to an isolated engagement which will generally mark the end of the action and impress upon it a decisive character.

Such was the attack directed against St.-Privat on August 18, 1870. It was necessary at first to win possession of the approaches, that is to say, of Ste.-Marie-aux-Chênes, then Roncourt, and, in the last place, to seize St.-Privat, after having rendered it untenable.

Such again, on a smaller scale, was the assault made November 9 of the same year by the Barry Division upon the park at Coulmiers. It marked the decisive act of the battle and determined the retreat of the I. Bavarian Corps.

Yet, in modern wars, with armies possessing equally powerful means of destruction, it often happens that the occasion for the supreme blow designed to give a definite result to the battle, is not presented at the end of the first day's conflict. The action then remains indecisive, and that commander the better comprehends the situation, who orders a resumption of the fight on the next day, and on the third day, if necessary, and so on until success declares for his side. Generally, the victory will be purchased at this price.

On the evening of August 14, 1870, after the battle of Borny, notwithstanding the fact that the aspect of affairs seemed favorable to us, the action remained indecisive. But the Germans, confident in their strength and in the fresh masses at their disposal, re-commenced the attack on the 16th. Here again the struggle terminated without leading to conclusive results. We believed ourselves victors, and such indeed we might have been. But nothing was as yet decided, and the enemy did not hesitate to renew the fight on the 18th. This time, the occasion was full of solemnity. Upon the issue depended perhaps the success of the entire campaign.

Unfortunately we did not grasp the importance of the situation.

§ 5.—PREMEDITATED BATTLES.

General Considerations.

The action of Fröschwiller showed us an unexpected engagement between two armies, one of them standing on the defensive, the other taking the part of assailant.

Every one felt that the contest was near at hand, but no one looked for it on the 6th of August. The event came about without pre-arrangement. It resulted from the march formations of the Prussians; their extended dispositions and the manner of spacing the groups in column; their practice of making reconnaissances to great distances in advance; lastly, and as a consequence of the foregoing, the latitude of action exercised by the chiefs of the grand units. As these formations and dispositions are now everywhere adopted, it is not doubtful that henceforth foreseen battles will often be converted into battles of *rencontre*, and that the latter will occur much more frequently than in past campaigns.

But how came it that the battle of Fröschwiller was necessarily an offensive action for the Prussians and a defensive engagement for us?

The cause is to be found in the tactical attitude of our adversaries, which was resolute, energetic, full of the spirit of initiative, and in their ardor; perhaps in the confidence they had in their strength; but certainly in the conviction, the result of profound calculation, that the offensive enlists nearly all the chances that lead up to success.

It was this conviction that on the 16th of August, 1870, impelled General Alvensleben to attack the Army of Metz with his single corps at the risk of being overwhelmed.

He knew that the means of action at his command, his artillery especially, would enable him to arrest us,

and inflict pronounced losses; that his force would be replaced on the evening of this day, or on the following day at the latest, by other corps equally resolute, as energetically commanded, as full of the conviction that their sole duty was to fall upon us wherever found.

Hence the assumption of the offensive on all occasions, even with inferior numbers.

The reason for this may be found in part in the attitude, in point of *morale*, that the assumption of the offensive, by one side, induces in the opposing army. A force that is assailed by another thinks only of defending itself, and when it has successfully resisted, it seems to it that enough has been done for its honor and security.

It deceives itself, however, and this impression, notwithstanding its apparent logic, will often be a source of danger.

History has sufficiently demonstrated that a victorious resistance remains without result if it is not immediately followed up by an energetic offensive; yet this offensive can scarcely be undertaken after a first combat without the aid of fresh troops.

There is, then, only one conclusion to be drawn from these facts: The offensive alone, the offensive in all places, the offensive at all times, no matter what the hour or character of the weather; the offensive always, until the adversary is exhausted or annihilated:—such is the general rule and practice for grand units.

Yet the energy, resolution, and tactical methods of one of the adversaries in 1870, was not the sole motive for the adoption of the offensive.

There was another, more material, more tangible, surely more practical, the scope of which it is important to correctly appreciate,—the superiority of the German artillery.

At Frœschwiller, the influence of this means of action was made evident from the beginning of the engage-

ment. Only one of the contending forces was in condition to prepare its attacks by its batteries; the other could do nothing in this direction.

As a result, although the latter army displayed most brilliant gallantry, although its officers and soldiers were full of ardor, although it possessed an excellent infantry weapon, it was powerless to take the offensive; while the opposing army, which was assured of a numerical superiority,—that potent factor of victory,—could dare anything.

In 1866, on the contrary, the Prussian artillery had not always the best of it, and wherever it was overborne by that of the Austrians, the Prussian offensive met with a check.

Often, even, the assailant was thus reduced to a tactical defensive, which subjected him to the fear of defeat, particularly on July 3, 1866, in the woods of Sadowa and Maslowed.

But even in these localities, the immense superiority of the Prussian infantry arm was able to draw victory to that side. Its fire was of sufficient power to break the force both of the enemy's artillery and infantry blows.

The offensive, consequently, was here prepared by a combination of the efforts of these two arms.

In 1870, the superiority of the Prussian artillery made its influence felt during the entire campaign; and this advantage almost always permitted our enemies to nip our offensive attempts in the bud. And even in the cases where a partial success was gained, and we endeavored to complete it, the crushing effect of our adversary's artillery fire rendered the dash of our troops of no avail. So true is this, that henceforth an infantry attack will stand no chance of success if the artillery has not previously rendered the action of the enemy's batteries nugatory, and broken up the cohesion of his infantry.

In no way, perhaps, can the truth of this conclusion be more strikingly demonstrated than by a study of premeditated battles.

Let us, in the first instance, enter upon a consideration of one of the battles of modern times that perhaps of all others was the most essentially a foreseen engagement, that of Sadowa (Königgrätz).

§ 6.—BATTLE OF SADOWA, JULY 3, 1866.

I.—Situation.

At 6 P. M., on July 2, the three Prussian armies were still under the impression that the Austrian forces were concentrated beyond the Elbe, between Josephstadt and Königgrätz. They themselves were posted thus: The I. Army and the Army of the Elbe upon the Smidar-Miletin line, 4½ miles from the Bistritz; the II. Army upon the Elbe itself, holding the line Arnau-Königinhof, about 5 miles distant from Josephstadt.

The generalissimo directed Prince Frederick Charles to advance toward the Elbe the next day, July 3, but to make the move with extreme caution, and to be on the alert to gather information upon the nature of the ground and the location of the enemy.

The II. Army was to execute reconnaissances on its front, toward the Aupa and the Metau.

Both forces were warned that in case of a retreat on the part of the enemy, the main strategic design was to be put into execution, which was to threaten his lines of communication by a movement upon Pardubitz.

But on the afternoon of this day, the 2nd, the situation changed; unexpected news from the front acquainted Prince Frederick Charles with the fact that his force was the nearest to the enemy.

The first intelligence brought in, was to the effect that an Austrian camp had been espied at Lipa, 3¾

miles from his positions. Later, prisoners were taken in the neighborhood of Dub, in the direction of Königgrätz, who made known that the former place was occupied by a brigade, and that about four corps were stationed upon the Bistritz, that is to say, a force of at least 120,000 men, in positions as follow: The 3d Corps at Sadowa; the 10th at Langenhof; the 1st behind Langenhof; the Saxon Corps at Problus; and 10 regiments of cavalry, together with masses of artillery, at Lipa. Evidently this was the entire Austrian army.

The Prussians had found the enemy they sought. Two officers, especially, a lieutenant of cavalry and a major belonging to the staff, deserve the credit of this discovery. With inconsiderable patrols they had pierced the enemy's cavalry screen and come upon his cantonments. They had been hotly pursued, but being bold horsemen and well mounted, succeeded in getting back in safety. Their reports, communicated to the staff of Prince Frederick Charles, between 6 and 7 P. M., were to give birth to the project of an immediate battle and to pave the way for the resulting success.

The commander-in-chief of the I. Army immediately came to the determination to attack the enemy at daybreak, crush him if possible, and cast him upon the Elbe, which lay at his back. This resolution of the Prince had the effect of enlisting on his side all the advantages of the offensive. But to give efficacy to his design, it was imperative to subject his troops to the fatigues of night manœuvres, in inclement weather, and upon wet and heavy soil.

Yet he did not hesitate.

The necessary orders were forthwith dispatched. The baggage was to be shifted to the rear, to a mean distance of a half-march.

The directions sent General Herwarth were in the following terms:—

"The I. Army will be formed in order of battle at daybreak to-morrow for the attack of the position on the Bistritz at Sadowa, on the Horitz-Königgrätz high-road. General Herwarth will move forward with all his available forces to Nechanitz, reaching this place as soon as possible. At the commencement of the engagement I shall be at Milowitz.

"Report to me as early as practicable the hour you reach Nechanitz, and in what force.

(Signed) "FREDERICK CHARLES."

General Herwarth received this order at 12:30 A. M., and at once issued the following instructions:—

"The Austrians still hold the line of the Bistritz, and the Horitz-Dub-Königgrätz road. The I. Army will attack them upon this road to-morrow at daybreak. The Army of the Elbe will move against their left flank, the general direction being towards Nechanitz.

"The divisions will start at 3 A. M., taking with them only ammunition and medicine wagons, and empty carts filled with straw for the wounded. All other wagons will be left at the places of bivouac.

"The Schöler advanced-guard will march upon Nechanitz by way of Skriwan, Kralic, and Kobilitz.

"The Canstein Division will set off toward Nechanitz *viâ* Neu-Bidsow and Prasek; it will hold Neu-Bidsow until the Rosenberg Division comes up, and will cover the right flank, throwing out patrols toward Chlumetz.

"The Münster Division will start at 3:30 A. M.; will cross the Jaworka at Smidar, and move by Podolib on Lodin, where it will, according to circumstances, turn off in the direction of Mzan, or continue on by way of Sucha or Nechanitz.

"The Etzel Division will pass at Smidar, and follow the road taken by the Schöler advanced-guard.

"The Reserve Artillery will move out at 3:30 A. M.,

and will at first follow the Etzel Division; then, having reconnoitred the roads at an early hour, it will, if from the result of the reconnaissance it is practicable to do so, follow the Münster Division to Nechanitz; otherwise it will continue in rear of the Etzel Division.

"The Rosenberg Division, setting forward at daybreak, will move from Kopidlno to Neu-Bidsow.

"The headquarters will march with the advanced-guard."

At the same time the Crown Prince was requested to attack the enemy's right flank, upon the right bank of the Elbe, with at least a corps, but with his entire army if possible.

After dispatching these orders, the chief-of-staff of the I. Army started for Gitschin to refer them to the generalissimo and request his sanction of the measures adopted.

A council of war was forthwith called. The presence of the Austrian army upon the right bank of the Elbe was regarded as an indication that an attack was to be made on the next day against the I. Prussian Army. In consequence the II. Army was, without hesitation, directed to renounce the reconnaissances prescribed for this day, and to throw itself with all its forces upon the enemy's right flank.

By midnight, orders to this effect were drawn up in duplicate, and dispatched by two staff officers, one of whom was to ride past the cantonments of the I. Corps, to the commander of which he bore a communication requesting that this corps be at once put in movement.

We are to have then a premeditated battle. It is to be observed that notwithstanding the distances separating the headquarters and the troops,* all the orders had

*The Prussian army at the time extended over a space of about 23 miles.

been sent out and some of them received within five hours after the news of the Austrian positions had been brought in. The resolution to deliver battle had been formed, and the plan of tactical offense had been settled upon and transmitted to the chiefs of the grand units. Preparations for the impending contest were to begin at once.

II.—Preparations for the Action.

THE PRUSSIAN ARMY.

The orders enjoining the setting in motion of the I. Army and the Army of the Elbe were received between midnight and 2:30 A. M.

The darkness, the rain, and the heavy character of the roads, conspired to retard the execution of the movement. But by dint of the energy displayed by all the officers, each division was in its assigned place a little after sunrise, or at about 6 A. M.

The 7th Division (Fransecky) was at Cerekwitz.

The 8th Division (Horn), at Milowitz.

The 3rd Division (Werder), at Psanek.

The 4th Division (Herwarth), at Bristan.

The 5th and 6th Divisions, in reserve at Horic.

The 2d Cavalry Division in bivouac at Lisbowitz and Baschnitz.

The Army of the Elbe held its advanced-guard ready for a debouch from the wood of Kobilitz at 7:30 A. M.

In the II. Army, an incident occurred which might have led to grave consequences.

Upon receipt of the request of the commander of the I. Army, the Crown Prince at 3 A. M. replied through his chief of staff, General Blumenthal, that he would be able to lend this army the support of but one corps; that another was to make a demonstration toward Josephstadt; but that pursuant to an order from the

generalissimo, the remaining corps were to hold the positions then occupied.

By a fortunate chance the staff officer conveying this reply, encountered, just after leaving Königinhof, the bearer of the King's order prescribing the forward march of the entire II. Army. Both had a knowledge of the contents of the letters which they bore; and after a mutual communication in this particular, the officer intrusted with the dispatch of the Crown Prince at once returned to headquarters, thus on his own responsibility relinquishing the service for which he had been delegated.

The result was that all the corps of the II. Army were directed to forthwith put themselves in movement, leaving their baggage at the cantonment sites. The orders in the case were issued at 5 A. M.

Meantime, Prince Frederick Charles proceeded to Milowitz, which was reached at 1:30. The project of the offensive had matured in his mind and assumed a definite shape. His idea now was that as his Milowitz troops were nearest the enemy (about 2¼ miles), the first encounter would occur on the road from Horitz to Königgrätz; that a strong thrust upon the Austrian left wing would be made by the Army of the Elbe; and that the II. Army would probably assail the enemy's right flank with an overwhelming force.

Consequently the course of the I. Army was quite distinctly marked out. It was to engage the attention of the adversary in front, invite his attack, and vigorously resist him, while the blows against his wings were preparing.

Thus the strategic combinations adopted at the opening of the campaign, and the first marches, were to permit a front and a double flank attack with a great superiority of numbers. This was one of the most advantageous situations that could possibly be presented.

THE AUSTRIAN ARMY.

Things took on a different complexion with the Austrians. It has previously been seen that according to General Benedek's *projet* of operations, the line of the Iser was to be guarded by the I. and the Saxon Corps, and the bulk of the forces was to be moved to this side for an offensive stroke against Prince Frederick Charles, while detachments sent to the right were to obstruct the advance of the Crown Prince's heads of column.

He had clung to this idea in spite of the character of the opening incidents of the campaign.

But on the evening of June 28, after receipt of reports concerning the last combats, and furthermore fully realizing the exhausted condition of his troops, the Feldzeugmeister began to entertain doubts of the possibility of executing his movement of concentration upon Gitschin and the Iser.

He reverted then to his original plan of assembling his forces between Miletin and Josephstadt; and in the vicinity of Dubenetz took up a preliminary position faced to the north and east. Events had forced him to adopt a defensive attitude against the II. Prussian Army, whose advance indeed had checked his march. These measures of concentration could not however be effected without fresh engagements, one of which, that at Gitschin, brought about the disorganization of the I. Corps, already sadly tried at Podol, Münchengrätz, and Kost, and whose men were demoralized by a continued retreat from the frontier.

Finally, on the 30th, General Benedek had his army assembled. But its situation did not on this account cease to be critical. Five corps out of eight had already been engaged; four had suffered enormous losses; more than 30,000 men had been rendered *hors de combat* by the enemy's fire; two corps only were still intact; all the troops, without exception, were fatigued or entirely

worn out, and a portion of them had become discouraged by the checks sustained, stroke upon stroke, for some days previous; finally, since the occupation of Gitschin by the Prussians, the left flank of the army was in the air.

Nothing was left then but to beat a retreat to Königgrätz, the order for which was issued June 30. In the opinion of the different corps commanders, this movement was justified on the grounds of the excessive losses sustained, the necessity of reorganizing the forces and giving them a few days' rest in preparation for the approaching conflict, and the difficulty of providing subsistence.

The withdrawal of the troops was executed without hindrance, and on the evening of July 2 the Austrian army was in position from Racitz upon the Trotina to Nechanitz upon the Bistritz, the headquarters being at Königgrätz. The various forces were posted as follow:—

2nd Corps, at Lochenitz.

4th Corps, between Nedelist and Lochenitz.

8th Corps, between Nedelist and Horenowes.

3d Corps, behind Sadowa, with headquarters at Lipa.

10th Corps, to the south of Lipa and the Königgrätz road.

6th Corps, at Wsestar.

1st Corps, at Kublena, near Königgrätz.

Saxon Corps, at Lubno, Hradek, and Nieder-Prim.

1st Light Cavalry Division, between Stösser and Kublena.

2nd Light Cavalry Division, at Trotina.

2nd Reserve Cavalry Division, near Wsestar.

3d Reserve Cavalry Division, at Dohalist.

Reserve Artillery of the army, near Nedelist.

During the course of the withdrawal upon Königgrätz, Benedek was able to judge for himself of the condition of his army. He was deeply pained at the sight of the

columns. Discouragement seized him, and in his distress of mind he begged his sovereign to conclude peace at any price. It was possible to accept such counsel only after a general engagement. An effort was made to revive the spirits of the general-in-chief and of his troops by making certain changes recognized as necessary.

The commander of the I. Corps, and the chief and sub-chief of staff, were removed. Finally, after further reflection, and in view of the repose which the army was able to take on the 2nd, the Feldzeugmeister became somewhat more hopeful, and attentively followed the intelligence coming in respecting the movements of his adversaries.

Already, in preparation for receiving an attack, he had, on July 1, examined the ground on the right bank of the Elbe, and ordered the throwing up of field-works in this quarter.

Three batteries were constructed northward of Nedelist and two to the north and west of Chlum. Two others were to be erected in rear of Lipa, on the morning of the 3d, and likewise rifle-trenches were to be run around these epaulements, and the western fronts of the villages of Chlum, Lipa, Nieder-Prim, and Problus, put in a state of defense.

On July 2, the uppermost thought with the Austrian leaders was to re-form the troops, and rest them for several days either on the right bank of the Elbe or behind this river. But during the afternoon of this day, reports coming in from different sides certified the approach of the Prussian masses, and soon swept away all doubts on the score of a battle on the following day. Benedek consequently decided at 11 P. M. to give orders in this sense.

He foresaw the likelihood of two attacks: one against the Saxon Corps alone, the other against the entire army. To meet these he prescribed:—

To the Saxon corps, to occupy the heights of Dopowitz and Tresowitz, refusing the left wing, which was to be covered by the 1st Light Cavalry Division; to the 10th Corps (Gablenz), to take position to the right of the Saxon Corps; to the 3d (Archduke Ernest), to occupy the heights of Lipa and Chlum, on the right of the 10th Corps; to the 8th, to support the Saxon Corps, holding itself in reserve behind the latter.

To provide for the case of an extension of the action to the centre and right, the Austrian general ordered:—

The 4th Corps to deploy beyond the 3rd, between Chlum and Nedelist; the 2nd, to take station still farther in this direction, in contiguity with the 4th, on the extreme right flank, supported in rear by the 2nd Light Cavalry Division.

Lastly, the 1st and 6th Corps were to be massed upon the heights of Rosnitz and Wsestar, respectively; the 1st and 3rd Reserve Cavalry Divisions, to hold themselves in rear at Sweti, having the 2nd Reserve Cavalry Division on their left at Briza.

Under the second supposition, that is, of an extended attack, the 1st and 6th Corps, the five cavalry divisions, and the Reserve Artillery of the army, were designed as a general reserve to be held under the immediate authority of the Feldzeugmeister.

Somewhat detailed instructions looking to a possible retreat beyond the Elbe, terminated this order.

The Austrians had then, like their adversaries, foreseen the battle of July 3; but their dispositions seemed to be limited to a passive defense of the heights upon which they had made a stand.

III.—Preliminaries of the Battle.

The position upon which the action was about to be joined is worthy of consideration.

On the west front ran the Bistritz, a small river, diffi-

cult of passage in ordinary times, but now very much swelled by the rains of the previous days.

Northward, between the Bistritz and the Trotina, was a tract about 3 miles wide, which permitted the advance of the assailant columns. The ground between these two rivers and the Elbe is gently undulating, and studded with villages and woods, which offered the defense advantageous points of support. In the centre, the hill of Chlum formed the key to the position, and commanded the road from Sadowa to Königgrätz.

The heights of Horenowes covered the right to the north; and those of Hradek and Problus formed a solid *point d'appui* for the left. To the south, the position at Liebau permitted the communications of the army to be protected in this quarter.

The ground selected possessed, then, considerable defensive value; but it had also this defect, that at its back lay the Elbe and the defiles formed by the bridges.

At 6 A. M., orders were issued for a general advance of the Prussian forces to the Bistritz; but they were not however to attempt an immediate attack.

The 8th Division (Horn), forming the advanced-guard of the centre, moved forward from Milowitz towards Sadowa, on, and to the left of, the high-road. The 3rd and 4th Divisions marched abreast of the 8th, to the right of this road.

The 5th and 6th Divisions, as well as the Reserve Artillery, followed the 8th Division. The Cavalry Corps marched behind the 3rd and 4th Divisions, and was to keep up the touch with the Army of the Elbe, which was advancing toward Nechanitz. The latter, being closer to the enemy, would no doubt become engaged first.

The 7th Division (Fransecky) was to be echeloned in rear of the centre, with instructions to leave Cerekwitz only upon the kindling of the action at Sadowa.

The cavalry of the 5th and 6th Reserve Divisions was formed into a brigade, and placed under orders of the commander of the II. Corps.

This army stood then with 3 divisions in first line and 3 in rear, the latter forming a sort of reserve.

This manœuvre-march disposition seemed to aim solely at permitting an easy passage to the combat order, giving facility for supporting the action with vigor, and for prolonging it by successive efforts up to the decisive moment, that is to say, until the arrival of the II. Army.

Turning to the Austrian forces, the dispositions made, were, from the opening shots, to give the Prussians partial advantages throughout the entire front.

Thus the outposts were generally formed by the battalions guarding the villages beyond the front and flanks, consequently from Trotina upon the Elbe to Sadowa upon the Bistritz, thence on to Nechanitz, and from there to Hradek. This, in brief, was a spreading out of forces.

The Prussian columns moving forward in concentrated order with strong advanced-guards (a brigade at least), were able to bring a great numerical superiority to bear upon the first villages encountered, and to throw back the enemy upon all points of attack. This naturally had the effect of heightening the *morale* of the offensive, and of producing depression of spirits in the ranks of the defense.

At 7:30, indeed, the advanced-guard of the Army of the Elbe debouched upon Alt-Nechanitz, and easily captured the place, which was held by only a grand-guard of two companies.

The dispositions taken by the Prussians had then assured them the numerical ascendency in the first affairs. Nevertheless, in consequence of the difficulties of the march, several hours slipped by before the main forces of this army were able to effect their deployment upon

the left bank of the Bistritz, and bring their artillery into action.

In the meanwhile, the two cavalry divisions were deployed between Sucha and Zawadilka, consequently between Sadowa and Nechanitz, faced toward the Bistritz, their batteries in advance, but out of reach of the enemy.

The 4th Division had marched from Bristan upon Sadowa, covered by a regiment of cavalry. At 1500 metres from the adversary, it received his first shells, when a duel of artillery began. Occupying a position upon the approaches to Sadowa, it kept up a steady fire, refraining, in pursuance of orders, from coming to decisive blows.

The 8th Division, from Milowitz, also moved upon Sadowa, preceded by a regiment of horse. It took post to the left of the 4th, seized whatever shelter could be found, and opened upon the opposing lines.

The two reserve divisions (5th and 6th) stood at Klenitz, and the Reserve Artillery advanced to within 1500 metres of the enemy.

In the left wing, the 7th Division was put in movement at the first note of the cannon, after establishing communication with the II. Army by patrols of officers. It marched on Benatek, which was occupied by the enemy in no great strength, and which fell into its hands after an artillery contest.

In the II. Army, at 8 o'clock, the advanced-guards of the VI. Corps, the Guard, and the I. Corps, were *en route* for the Trotina and the tract between this river and the Bistritz.

The commander-in-chief of the I. Army had taken a survey of the positions, and ordered that only a slow response be made to the enemy's fire, his purpose being to await more favorable weather, and especially the coming up of the II. Army.

The King of Prussia arrived in turn, welcomed by the cheers of his troops, whose confidence was intensified by his presence.

The Austrian army began its deployment at the instant the cannon of Sadowa broke into fire.

The 3d Corps held Lipa, Chlum, Cistowes, and Sadowa. The Prohaska Brigade, posted in the last-named village, was to defend it only as a rear-guard position, withdrawing as soon as the corps was in its assigned place.

The 10th Corps moved to Dohalitz, Dohalicka, Mokrowous, and the heights to the east.

The Saxon Corps threw forward a brigade into the first line for the occupation of Lubno, Popowitz, and Tresowitz, points permitting a defense of the Bistritz in this quarter. The remainder of its forces stood on the hills of Nieder-Prim and Problus.

The 1st Light Cavalry Division was moved to the plateau between Charbusitz and Nieder-Prim.

The 8th Corps was installed to the east of the Saxons, close to Stezireck and Problus.

The right wing was formed by the 2d and 4th Corps, which were to be established with faces to the north. But the outpost brigade of the 4th Corps having been assailed at 7:30 A. M. by the 7th Prussian Division, which had pushed beyond Cerekwitz, and the Chlum-Nedelist site assigned to this corps having been discovered to be dominated from the side of Maslowed and Horenowes, a new position was taken up farther in advance, toward Cistowes. There three of its brigades forming front to the west toward the wood of Maslowed, became the object of Prussian attacks.

The 2d Corps had orders to form line to the right of the 4th. In consequence of the movement executed by the latter, it directed itself upon Horenowes, and occupied the space between this village and Maslowed.

As a result of these dispositions, the ground comprised between Horenowes and Racitz was to remain undefended; and should the action developing toward the west have the effect of drawing these two corps in that direction, the Austrian right flank would be entirely uncovered.

The 6th Corps, in reserve, was massed between Langenhof and Wsestar, the 8th on its left.

The 1st Reserve Cavalry Division stood in regimental columns to the south of Chlum, while the 2d moved to the southwest of Briza, and the 3d, marching from the Bistritz, took station to the north of Sweti.

The Army Reserve Artillery remained in two groups, one northward of Sweti, the other to the south-west of Chlum.

To recapitulate, the Austro-Saxon army, toward 8 A. M., was formed as follows: Nearly 5 corps were deployed upon a line about seven miles long; 3 brigades were in reserve behind the left wing; a brigade linked the right wing to the Elbe; 2 corps and 5 cavalry divisions constituted the principal reserve, which stood at a distance of a little less than 2 miles from the centre of the position.

The Austrians had about 215,000 men and 770 guns. The forces confronting them, the I. Army and the Army of the Elbe, counted a strength of 123,918 combatants, who, though unacquainted with the numbers of their adversaries, did not hesitate to assail them.

IV.—Development of the Action.

By 9 A. M., the Prussian left (7th Division, Fransecky), which had already seized Benatek, was moving toward Cistowes. Upon the road to this place was a wood of large dimensions, the Swiep-Wald, which offered an advantageous position. This the Prussians attacked, the

enemy opposing a vigorous resistance. The contest raged with varying fortunes, the 7th Division by degrees engaging all its battalions, and applying for assistance to the 8th Division, which was marching past Skalka Wood.

In the Austrian ranks the combat was developing in a similar way by the entry into line of successive reinforcements drawn, first, from the 4th corps, then from the 2nd. The efforts of the two contending parties centered in a struggle for the possession of this wood, whence the Prussians hoped to be able to dart forward either upon Maslowed or Cistowes, perhaps upon both villages at the same time.

At the outset, the assailant had engaged one regiment, the 27th, which, encountering two Austrian battalions in front, had driven them back, notwithstanding the support afforded them by a battery.

The first reinforcements sent the Austrians were not sufficiently strong to give them the numerical superiority; consequently the Prussians remained masters of the wood, though they were completely baffled in their attempts to emerge from it.

In order to reseize it, the Austrians, forced to advance in the open against a sheltered enemy, and consequently to submit to enormous losses, were under the necessity of deploying forces of considerable strength.

At 11 A. M., they repossessed the greater part of the wood; but their adversary still retained his grasp of the north-west corner, where he then had in action 14 battalions and 24 pieces, about 14,000 men, opposed by 40 battalions (about 40,000 men) and 128 guns.

The Prussians had exhausted their reserves; while their antagonists, on the contrary, still held 11 battalions and 24 pieces at disposal. Toward noon, the balance of advantage was, then, on the side of the Austrians; they had only to make a decisive effort, and success

seemed assured. But two unexpected circumstances, an order of withdrawal, and the coming up of the advance batteries of the II. Army, gave an opposite color to the situation.

In the centre, the action was not less energetic. Toward 8 o'clock, the columns of the I. Army had reached the Bistritz, almost simultaneously with the arrival of the Army of the Elbe. The combat, kindling first at Cerekwitz and then at Nechanitz, soon broke out along the entire valley. (*See Plate XVII.*)

At Sadowa it commenced by a violent artillery fire on the part of the 8th Prussian Division against the 3rd and 10th Austrian Corps. After the 7th Division had passed Benatek, the 8th moved against Skalka Wood and Sadowa, the first points of shelter coming into view. These two positions, weakly guarded, were occupied without difficulty by the assailants, who wished then to issue on the farther side; but the fire of the Austrians forced them back, one part into the Swiep-Wald, the other into the wood of Hola, between Sadowa and Lipa.

From this time all attempts of the Prussians to debouch from these shelters proved ineffectual.

The 3d and 4th Prussian Divisions having arrived on the scene between Mzan and Zawadilka, directed their leading troops upon the sugar-refinery of Sadowa, and by the wood of Zawadilka upon Johanneshof; but the brigades of the 10th Austrian Corps intrusted with the defense of the valley, prevented their gaining ground beyond. Unfortunately, the abandonment of Sadowa by the Prohaska Brigade obliged the Austrians to successively evacuate Dohalitz, Dohalicka, and Mokrowous, and to continne the rearward movement to the heights of Langenhof. The Prussians immediately reoccupied these points. But in this qnarter also the enemy's artillery discharges interdicted further advance.

Toward mid-day there were between Lipa and Lan-

genhof 160 guns, which kept up an unintermitted fire. The I. Army at this time had been able to bring into action on this side only 132 guns. The result was, that the three Prussian divisions which had crossed the Bistritz soon found themselves in a most critical situation.

Meanwhile the Army of the Elbe encountered difficulties of a peculiar kind.

After the seizure of Nechanitz, it was obliged to restrict itself in its passage of the Bistritz to this place, not having been able to establish a bridge at any other point. As a result, its attack was long delayed, and although the Saxons offered no hindrance to its deployment upon the left bank, noon had nearly arrived before the contest on this side assumed serious proportions.

In brief, this was the state of affairs at about 12 M.:—

On the Prussian left was the 7th Division, which had been forced back upon Benatek with considerable loss, but whose obstinacy had drawn successively into action the 2d and 4th Austrian Corps, constituting the right of the opposing line. The latter, leaving their original positions, had formed front to the west, and exhausted their forces to obtain in the Swiep-Wald a success that was now to cost them dear.

In the centre, the defenders' *points d' appui* upon the Bistritz having been feebly held, had fallen into the hands of the Prussians. But the latter, battered by a formidable artillery, from whose reach they were unable to withdraw on account of the river at their back, suffered cruel losses. Recoiling before the blows dealt them, the disordered ranks made their way to the approaches to Hola wood, whither Prince Frederick Charles moved the 5th and 6th Divisions, composing his reserve. The counter-offensive executed by these fresh troops against the heights of Lipa also met with a repulse.

Tidings of the II. Army were still wanting, and the

assailant troops were considerably shaken; the leaders, convinced that the situation was no longer tenable, seriously debated the advisability of beating a retreat. On the right, however, the action had begun to acquire a considerable degree of intensity: the Army of the Elbe, at length master of its movements, was engaged in an attack upon the Saxons.

Up to this time, then, the Prussians had confined their efforts to opening the engagement, occupying all points of shelter found upon the front, advancing to the positions where the resistance was the most strongly organized, and vigorously maintaining the struggle. But the opposition encountered and the losses sustained, would no longer permit them to preserve the tactically defensive attitude which had succeeded their first offensive.

Happily for them, toward 1 o'clock the approach of the Crown Prince was announced.

V.—Decisive Movements.

At 11 A. M., when the Prussian armies in action were beginning to entertain a lively wish for support upon the left of their line of battle, the II. Army had as yet on the Trotina only the heads of column of the Guard and the VI. Corps. Nearly 5 miles separated them from the left of the I. Army.

Presently the other troops reached the first points assigned them as objectives. Their march had led to a contraction of the front, that is, to a concentration of the various bodies. The movements had, then, been executed concentrically; the space between the extreme advanced-guards had, in three hours, narrowed from 23 miles to 9. This army, following the traditional rule, had then concentrated for action.

Upon arriving in the vicinity of Choteborek, the Crown Prince sought an elevated point from which to

survey the line of battle of the I. Army and the combat front of the Austrians. Notwithstanding the rain and fog, he was able to make out the situation of affairs from the flames of burning villages and the flash of the guns. He saw that to reach the enemy's flank and rear he had only to march his columns straight on. He dispatched officers to indicate to them the heights of Horenowes, between the village of this name and the Elbe, as the objective, and designated particularly two trees visible from all points. (*See Plate XVIII.*)

This indeed was a preparation for the decisive effort, and in the II. Army it was felt that this attack had a capital importance; but it was likewise supposed that the enemy had been warned and had made preparations to meet the danger. The contrary was however the case.

An unforeseen disposition on the part of the adversary's forces was to still further favor the Prussians. The Austrian general-in-chief had just perceived that the two corps ordered to the portion of the field in the direction of the Elbe, had advanced beyond their assigned stations, and that instead of covering the line of battle on the right, they had moved forward toward the Bistritz. Upon being apprised of the march of a Prussian corps to this side, he ordered them to fall back to their first posts, at the very moment when, having beaten the 7th Prussian Division, they were on the point of passing to the offensive. It was necessary however to obey the order, and while leaving troops in the Swiep-Wald, the main bodies of the 2d and 4th Corps were obliged to put their columns in march at the moment, toward noon, when the batteries of the II. Army entered into action. This artillery consisted of 48 pieces, which were posted between Racitz and Horenowes. This movement of the Austrians seemed then in the nature of a retreat; it forced their guns also to take up a rear-

ward station. In fine, the two Austrian corps, already severely tried, had to execute a veritable flank march exposed to the enemy's fire.

The 2nd Corps, which had withdrawn from the Swiep-Wald to Nedelist, found itself under the necessity of dispersing its brigades, placing them thus in a situation the least calculated to realize the full effect of their blows.

The 4th Corps likewise could make only a piecemeal retirement of its forces toward Chlum. Thanks to the support of 64 pieces belonging to the Army Reserve Artillery, however, it was enabled to collect its regiments between this place and Nedelist.

During the execution of these operations, the II. Prussian Army was able to continue its advance almost without resistance. While the Guard was arriving at Horenowes, the VI. Corps, debouching from Trotina, gained ground toward Lochenitz. At 2 o'clock these new masses were disposed as follow:—

The 12th Division, at Lochenitz, forcing back the Henriqnez Brigade of the 2nd Corps;

The 11th Division, in march from Sendrasitz to Nedelist;

The 1st Division of the Guard, coming into line-of-battle order to the east of Maslowed;

The 2nd Division of the Guard, at Horenowes;

The Corps Artillery of the Guard, together with the batteries of the 7th Division and the 1st Guard Division, about 72 pieces, in position before Maslowed;

The remainder of the II. Army, hastening forward to the scene of action.

A formidable attack, then, was preparing against the Austrian right. Meanwhile, in the left wing the struggle had taken on such an intensity and become developed in such directions that the situation could not long remain uncompromised.

The Saxon Corps, instead of defending the approaches to the Bistritz, had taken station upon the heights of Prim-Problus, leaving on the left the dominating points in the vicinity of Hradek, which, with the hills of Chlum and Horenowes, formed the principal positions on the field of battle.

Thus upon their arrival, the advanced-guards of the Army of the Elbe were able to seize upon Lubno and Hradek without difficulty. Batteries placed between these two points, opened fire against the Saxons and protected the deployment of the remainder of the troops. General Herwarth, aware of the critical state of affairs in the I. Army, resolved to take the offensive as soon as his forces were up.

At 11:30, he threw forward two columns against the flanks of the enemy's position: the 15th Division and a brigade of cavalry upon Ober-Prim; the 14th Division upon Popovitz and Problus, by way of Lubno. The rest of his troops were to form between Lubno and Hradek in reserve, and be kept in readiness to hold the Saxons fast in front in case of need.

While this movement was in progress, there was apparently a drooping of the action. The Crown Prince of Saxony conceived that the moment had come for an attack of the forces established at Hradek. But when his advancing brigades had arrived near Neu-Prim, they were taken in flank by the columns marching upon Ober-Prim, and compelled to retire. The 8th Corps was then directed to move forward to guard the Saxon Corps against the danger of being turned on its left. Unfortunately the position of the Prussians was very advantageous; moreover the retreat of the 2d Saxon Brigade had uncovered the Body-Guard troops posted on its right, and had thus obliged them likewise to draw off toward the heights of Problus; while the artillery redoubled its fire to stagger the ranks of the assailant.

Simultaneously with these proceedings on the extreme left, the Prussians had gained Popowitz, then the wood eastward of this village, and had begun to move forward in force upon Problus. The Saxons were constrained to give way before the onward march of these new masses; and at about 2:30 P. M., the Crown Prince of Saxony ordered a retreat to the heights south-west of Rosnitz. To cover the movement, the 1st Austrian Corps attempted a counter-offensive, which however came to naught.

In brief, toward 3:30 P. M., the Army of the Elbe had thrown back the Austrian left, and seized the position of the Saxon Corps and the villages of Prim and Problus forming its points of support, as well as the Brizerwald, eastward from Nieder-Prim. It was brought to a standstill in this quarter only by the combined artillery of the 8th Corps and the Saxons.

The 1st Light Cavalry Division (General Edelsheim) had indeed attempted a diversion to the south in the direction of Techlowitz; but it was immediately recalled to the centre of the field of battle by intelligence of the reverse attack delivered by the II. Army.

On the Austrian right wing, in fact, the fate of arms was deciding in favor of the Prussians.

The 1st Division of the Guard, finding the heights of Maslowed unoccupied, had taken post there, formed its forces into three lines, and at 2 o'clock moved against the heights of Chlum. The battalions, profiting by the folds of the ground, and masked moreover by the smoke of battle, which was prevented from rising by the dampness of the atmosphere, were able to advance unseen to the Austrian intrenchments and drive away the defenders, whom the deadly fire of the needle-gun had decimated in an instant. The 4th Austrian Corps, seeing itself thus menaced on one side by the 11th Prussian Division and on the other by the Guard, was obliged to fall back toward Sweti.

Chlum was guarded by a single battalion, the rest of the brigade being sheltered in rear. This village was seized without a blow and most unexpectedly, while Feldzeugmeister Benedek was still upon the hill of Lipa to the west.

Vain were the attempts to recover the position, by reason of the destructive effects of the needle-gun. The assailant then continued his march, making for Rosberitz, which, at 2:30 P. M., also fell into his power. It was only by the blows of the Army Reserve Artillery that the advance of the 1st Division of the Guard was stemmed.

But at the stage of the action we are considering, the situation of the Austrian army was hopeless. Its centre was pierced, its right forced in, its left thrown to the rear. Most of the Austrian brigades in action since morning, had been obliged to retire, the movement being made in the direction of the Königgrätz road. The remainder of the II. Prussian Army advanced in support of the Guard. The progress of the VI. Prussian Corps had compromised the retreat of the 2d Austrian Corps, and compelled it to fall back upon Predmerist.

The loss of Chlum had in like manner obliged the 3rd and 10th Austrian Corps to withdraw toward Wsestar. The forces of Prince Frederick Charles had taken advantage of this to gain ground to the front.

To save the remains of the Austrian army, nothing was left but to bring the reserves into line. The 1st and 6th Corps deployed under fire, the latter then moving on Chlum, which was regained at the price of cruel losses. But the arrival of reinforcements to the Guard, rendered this partial success nugatory; the 6th Corps was repulsed. A forward stroke attempted by the 1st Corps in support of the latter, was shivered by the fire of the opposing infantry.

A general retreat of the Austrians toward Königgrätz

now began, protected at first by vigorously executed cavalry charges (principally in the direction of Stresetitz-Sadowa), and later by the artillery. The latter dedicated itself to the task of safeguarding the *débris* of the army in its passage to the left bank of the Elbe. The reserve artillery of the 6th Corps and a part of the army reserve batteries, established on the heights between Wsestar and Sweti, remained in action there with their supports, despite the most murderous losses, up to the moment when it became apparent that further sacrifice could serve no useful purpose. The artillery had, then, with the aid of the cavalry, succeeded in staying the onward progress of the enemy, thus assuring the retreat of the army. The Prussians brought 13 batteries into action between Langenhof and Stresetitz to play upon the retiring columns; but further than this, attempted no pursuit.

Benedek's army was thus enabled to take refuge behind the Elbe, and slip away under cover of night. By the next day it had disappeared, the major part taking the roads to Olmütz, but leaving the victor in ignorance of the direction of its retreat.

VI.—Comments.

1st.—Effectives and Casualties.

Viewed in the light of the forces engaged, the battle of Sadowa remains one of the most memorable of the century.

The Austro-Saxon army had an array indeed of 215,000 combatants and 770 guns; and the Prussians brought to the field 220,980 fighting men supported by 792 pieces.

The distribution of these effectives is also worthy of remark.

The Austrians engaged in the centre 43,276 infantrymen, 642 cavalrymen, and 134 guns; in the right wing,

51,300 foot-soldiers, 4,100 horsemen, and 176 pieces of artillery; in the left wing, 32,000 infantry, 7,600 cavalry, and 140 guns; and they had in reserve, 47,300 foot, 11,400 horse, and 320 pieces.

On the side of the Prussians we find: In the centre, *I. Army*, 84,860 men and 300 guns; in the right wing, *Army of the Elbe*, 39,000 men and 144 guns; in the left wing, *II. Army*, 98,000 men and 386 pieces; on the march, the Landwehr Division of the Guard, with a strength of 12,000 men and 12 guns.

From which we see that upon each of the three sections of the field where the action was decisively waged, the Austrians were, in general, outnumbered. But their inferiority was not made manifest until about the middle hour of the day; up to this time, especially upon the right, sufficient success had marked their course to move them to think of assuming the offensive.

The figures expressive of the losses in this engagement are peculiarly significant:—

The Austro-Saxons:	
Killed and wounded	23,941 men.
Missing	7,410 men.
Unwounded prisoners	12,960 men.
Total	44,311 men.
To which must be added, 187 guns, 641 wagons, and 21 pontons.	
The Prussians:	
Killed and wounded	8,877 men.
Missing	276 men.
Total	9,153 men.

The enormous difference between the casualties sustained by the two contesting forces, gives an idea of the advantages accruing to the Prussians from the use of the needle-gun and from the tactical methods in vogue among them.

Other elements, however, also contributed to their success.

2ND.—CAUSES OF DEFEAT.

The circumstances leading to the overthrow of the Austrian army are numerous. They merit so much the more attentive examination as, at the time, entire Europe believed the Austrians would be speedily victorious.

The strategic combinations of the Feldzeugmeister before July 3, had a great influence upon both the physical and moral condition of his army on the day of decisive action.

We have already noticed the defective dispositions by which five corps out of eight were led to fight in detail and exhaust their forces in incessant marches.

After the 29th, the necessity of renouncing operations upon the Iser, and undertaking a retreat to the Elbe, had still further aggravated the perplexities of the situation.

Lastly, the concentration of the Austrian masses upon the narrow space between Sadowa and Königgrätz had made it so difficult to keep up the supply of provisions, that no choice was left but to continue the retreat, or deliver battle without further delay.

It is certain then that the marches of the preceding days, the unintermitted fatigues, the bad weather, the unfortunate combats engaged in, the various retreats, insufficient distribution of rations, inferior generalship, and, above all, the weakness of the strategic combinations, had placed the imperial army in a most unfavorable situation. If the battle was not lost in advance, it was at least very seriously compromised.

From a general point of view, the course of events has occasioned the following comments:—

On July 2, at the council of generals held at headquarters, Benedek had no communication to make, either upon the engagement of the next day or the

ulterior operations. Yet the reports that had already come in, had given him a presentiment of the imminence of a great battle.

Orders for the action were not issued until 11 P. M., and certain of the forces did not receive them until 3 o'clock on the following morning. For a foreseen battle, this was indeed late.

Selection of the Position.—The resolution to deliver battle on the right bank of the Elbe was perhaps a necessity. But it is permissible to question the timeliness of the engagement actually accepted. The Austrian general-staff observes as follows on the subject:—

"Considering the situation of the imperial army, the Feldzeugmeister's plan of battle was far from being the most advantageous or the one that gave the most promise of success. To expose an army to an enveloping attack on the part of a numerically superior adversary, is in truth to commit one of the most serious possible strategic errors. A skilful general would have extricated himself from such an embarrassing position in one of the following ways:—

"By resolutely moving against the centre of the enemy's line and carving out a passage.

"Manœuvring in such wise as to gain opportunities for attacking the different hostile bodies separately and successively.

"Thrusting his forces against one of the wings of the opposing army for the purpose of jeoparding its communications.

"Or, as a last resort, by beating a retreat and establishing himself in a more favorable position in rear.

"In the state of affairs that actually existed, it would have been out of place to endeavor to pierce the enemy's centre; to manœuvre against one of his flanks would have been still more difficult, if we consider the physi-

cal and moral condition of the imperial army. Nothing remained for it then but to seek shelter behind the Elbe."

After discussing the advantages of the various positions that might have been taken up on the left bank of the Elbe, the Austrian general-staff, when it was too late to be of avail, gave the preference to that at Pardubitz. There, it would appear, the army would no longer have been exposed to the dangers of an enveloping movement; it could have waited until the enemy attempted a passage of the river, and then moved forward upon him under favorable conditions; it would have been near its supplies; and, lastly, in case of retreat, it could have chosen its line of direction upon Vienna or Olmütz.

Occupation of the Position.—The manner of occupying the position actually taken up, has been very severely criticised.

It has been said that the heights of Horenowes formed, with those of Chlum and Hradek, the principal points of the field; that the possession of Chlum should have been assured in the first instance; that it was essential, then, to so dispose the army as to prevent the enemy's reaching, either from the north or west, the high-road from Lipa to Königgrätz, which was the line of communication and retreat, and that this imposed the obligation of solidly holding the flanks of the position by placing sufficient troops there, and by profiting from the advantages of the ground.

To the north, it would then have been necessary to strongly occupy the right bank of the Trotina and the tract comprised between Racitz and the Bistritz; to the south, the defense of Nechanitz imposed itself as an obligation.

The Austrian staff, taking for a basis, moreover, the

principle that strong reserves are required in the defense of positions, has recognized that the situation demanded:—

1st.—The echeloning of two corps upon the line Trotina-Racitz-Benatek;

2nd.—The dispatch of two corps to Nechanitz and the heights in rear;

3rd.—The allotment of an entire corps to the defense of Lipa and Sadowa, aided by the fire of a numerous artillery;

4th.—The placing in reserve of three corps at Maslowed, Chlum, and Problus, with orders to move upon endangered points;

5th.—The employment of 3 of the 6 cavalry divisions for the execution, between Chlumec and Neu-Bidsow, of a strong demonstration against the enemy's right flank.

To these considerations we may add the following:—

It was to the interest of the imperial army to compel a deployment of the Prussian forces at the earliest possible moment; to produce fatigue in their ranks before they could gain the Bistritz; to dispute with them the passage of this river, since the crossing could be made only with difficulty; and, finally, to permit them to reach the main line only after putting them to a trial of strength, and after checking their momentum by the infliction of serious losses. Every consideration demanded that these results be obtained as soon as possible. To this end, two advanced-post positions should have been selected west of the Bistritz, upon the two roads which the Prussians must necessarily follow, and forces of all arms installed there in sufficient strength to arrest their advanced-guards. The Bistritz formed a first line of defense, upon which it was possible to bring the assailants to a stand. It presented the peculiarity of having villages scattered throughout the entire length of its course,

at intervals varying from 1000 to 1500 metres, and separated by marshy meadows difficult of access. By posting batteries in rear of the ground between the villages, it was possible to hold out here for some time, and force the enemy to a complete deployment.

The imperial army, it is true, had upon the Bistritz and beyond, detachments of considerable size; yet these engaged but slightly here by reason of the orders given, or changed their positions during the morning. As a result, the line of the Bistritz, its approaches, and the villages and woods lying beyond, were occupied by the Prussians without much effort; and from this time they held defensive points of support upon which it was possible for them to await events and keep up the contest.

The tactical dispositions adopted by the Austrians were, then, favorable to the offensive of their enemies. Their flanks were not sufficiently protected; the approaches were not organized for an energetic defense; the troops were too closely massed in the centre of the position, upon a contracted space. The Prussian columns arriving from the east, north, and south, could cut off their retreat or render it disastrous.

In his order for the combat, the commander-in-chief did not set forth a general view of the situation, and failed to make known the parts to be played by the various grand units, contenting himself with indicating to each the position to be occupied. From this resulted an absence of connection among the different bodies in moving to their combat posts; the uncertainty prevailing during the contest; the unnecessary abandonment of certain points, and the defense to extremities of other parts of the field whose possession was of little importance; finally, independent combats, and, consequently, a terrible crisis at the moment of decisive attack.

Development of the Contest.

The action on the part of the Austrians, commencing with the first cannon-shots, has given rise to the following observations.

The battle was begun during the rain, which kept the fog and smoke in the valley bottoms. This circumstance favored the Prussians, permitting them to approach unseen, and preventing the Austrians from ascertaining the extent of their movements.

The passage of the Bistritz at Sadowa not having been seriously defended, which was in accordance with instructions on the subject, it became necessary to abandon the villages situated in the valley to the south, under penalty of being subjected to a rear fire.

To the north, the tactiçal consequence of this circumstance of the action was the drawing in of the line of defense as far as the Swiep-Wald. This allowed the Prussians to reach at the outset a point within a mile and a quarter of the key to the position, through two woods of considerable extent and quite near together, which afforded sufficient shelter to enable them to withstand the blows of the hostile artillery. If the approaches to Sadowa had been defended for a longer period, Sowetitz and the wood of Skalki could have been held. Thus the 7th Prussian Division would have been brought to a halt in front of Benatek, and the desperate grapple in the Swiep-Wald avoided or at least delayed.

The contests that took place in this wood were remarkable for the obstinacy displayed by the leaders on both sides. They resulted in favor of the Austrians, who, braving the murderous effects of the adversary's rapid fire, fought on furiously until, by the force of their numerical superiority, success was here assured. It was none the less a regrettable event for the imperial army ; for it exhausted the strength of two corps, forced them to abandon their assigned places in the line of battle, and

put them out of condition to make head against the II. Prussian Army.

It is probable that the incidents of the contest would have run a different course, had the commanders of the 2nd and 4th Corps been given precise instructions upon the part they were designed to play.

On the Austrian left, the attack by the Army of the Elbe was at the outset favored by the feeble resistance encountered at Nechanitz; then by the manner of occupying the heights of Hradek; and, lastly, by the absence of hostile demonstrations upon the right flank,—operations which should have been undertaken by the cavalry and horse artillery.

Such were the principal tactical mistakes committed in the beginning of the action.

They did not, however, prevent the Austrian army from having, toward noon, a marked advantage on the right and centre; while on the left, it was able to maintain the contest, and even to think of repulsing the assailants.

Should the offensive have been taken by the Austrians at this moment?

This question, examined by the Austrian staff on the day of battle, and reviewed very often since, has been resolved in the negative. The offensive has been held inopportune, because all the Prussian forces had not yet been engaged; the corps placed in the right wing were no longer in condition to stand up against fresh troops; finally, an attack upon the heights of Dub, where the Prussians would probably make a concentration, offered the same difficulties as an assault upon the heights of Chlum.

To recapitulate, the terrible events marking the end of the action were the consequences of the dispositions made in the morning. They have already been described at such length that it would be useless to return to them

here. However, there is one of them upon which we may very properly dwell. How is it to be explained, indeed, that the 1st Division of the Prussian Guard was able, toward two o'clock, to establish itself in the village of Chlum, in the very heart of the position, without arousing even a suspicion of the true state of affairs in the minds of the Austrians?

This attack was favored by a combination of unexpected circumstances.

In the first place, the retrograde movement of the 4th Corps had left the Maslowed heights without defense. A single battalion held the village of this name. The Prussian Guard thus found the ground clear, and was able to advance to within 1400 metres of the Austrian batteries. Its march was protected by the fire of the guns posted immediately in front of Maslowed, and moreover was concealed from the defenders of Chlum by the smoke, the fog on the low ground, and the folds of the soil.

This force thus surprised the Austrian guns at intrenchment No. 5, and threw back the Archduke Joseph Brigade toward Wsestar and Sweti. Moreover, the direction taken by the latter had the effect of masking several batteries of the reserve posted between Chlum and Nedelist.

This occurrence still further facilitated the progress of the Prussian Guard, whose needle-guns compelled several batteries to retire.

Finally, the defensive organization of the plateau of Chlum was in itself a circumstance in favor of Prussian success.

When the hostile projectiles began to reach Chlum, Major General Appiano, to whom its defense had been allotted, moved his battery and the greater part of his infantry to the rear between this place and Rosberitz, leaving only a single battalion behind in the village and

another without on the Nedelist road. The Prussian Guard then advanced upon, and surrounded the place, before the Austrian battalion was able to grasp the real condition of affairs. The latter was obliged to lay down its arms.

From this moment the decisive act of the battle began, and when the Austrian general reserves came into line, it was too late. Their action availed only to cover the retreat. The open attack made by them upon the Prussian points of shelter had no chance of success.

The 1st Austrian Corps was convinced of this when, after a combat of twenty minutes' duration, against the 2d Division of the Guard, it saw half its 20,000 rank and file disappear, 280 officers rendered *hors de combat*, and 23 guns fall into the hands of the enemy.

3RD.—CAUSES OF PRUSSIAN SUCCESS.

It would seem that the observations already made would be sufficient to account for the brilliant victory at Sadowa. Many other circumstances however concurred to bring about this result.

First of all, the strategic combinations of General Von Moltke were to lead, at an opportune moment, to an angular attack upon the front and the right flank of the imperial army. Then, the assumption of the offensive was to insure great advantages.

The part to be taken by each fraction of the Prussian armies was very clearly marked out, at the same time that the exercise of the initiative by the chiefs of the grand units remained unhampered.

The predominant cause, however, is to be found in the murderous fire of the infantry arm, the excellent system of fire instruction in use, combat methods logically arrived at, known to all, and well adapted to the circumstances of this engagement; lastly, in the discretionary power exercised by all the officers, and the obstinacy displayed by them.

The effects of the needle-gun have already been alluded to.

We have seen that its action was favored by the bayonet attacks in close order, to which the Austrians still resorted, before sufficiently paving the way by the fire of artillery.

The disproportion between the losses sustained by the two armies shows what advantage the Prussians drew from this superiority in armament. Their tactical methods had a no less potent influence. In this battle the Prussian divisions in moving forward into action, generally adopted a formation in three groups,—advanced-guard, centre, and reserve. In the 7th Division, for example, the advanced-guard had a strength of 4 battalions, 4 squadrons, a battery, and a half company of pioneers. The centre, or main body, comprised 6 battalions and a battery; the reserve, 1¾ battalions, 2 batteries, and 1½ companies of pioneers.

These dispositions had the advantage of directing upon the foremost points of attack a succession of efforts which soon gave the offensive a great numerical superiority. This accounts for the rapidity with which the *points d'appui* on the Austrian front fell into the hands of the Prussians. Their groups gained the first shelter by defiling behind rising ground; and when a point was energetically defended, the artillery opened against it, while the infantry sought to outflank or turn it. The taking of Sadowa offers an example of this mode of engaging.

The 4th Division arrived at Mzan, 1500 metres from Sadowa, and at first contented itself with deploying and opening fire.

On its left, the 8th had meantime endeavored to make its way from Milowitz toward Sadowa; but upon meeting with resistance at the latter place, it moved to Sovetitz, and thence to Skalka Wood. It turned then

to the right, to the road from Sadowa to Königgrätz, for the purpose of gaining Hola Wood. The Austrians at Sadowa, in danger thus of being cut off, were obliged to abandon their post.

While the 8th Division (Horn) was in the act of seizing upon the wood just mentioned, the 4th (Herwarth) took possession of the Sadowa sugar-refinery, and then of Unter-Dohalitz, where it was sheltered by the same wood.

The attack of the Problus-Prim position was conducted in accordance with the same principles.

While one part of the Elbe army was engaging in front and making response to the Austrian batteries, two strong columns, each counting a division, moved upon the flank of the Saxon Corps. That of the right, masked by wooded hills, succeeded in turning it to the south, without raising suspicion of the movement; and while the combat was growing in this quarter, the left column also made progress. The Saxon Corps soon found itself unable to longer stand its ground. It fell back, and the Army of the Elbe advancing, menaced the line of retreat of the imperial army.

Similar movements were taking place upon the entire Prussian front from 8 to 11 o'clock. The enemy not being in force upon the Bistritz, this stream was crossed, the Austrian outposts pushed back, and at 11 the assailant was in occupation of Benatek, a part of the Swiep-Wald, Hola Wood, Dohalika, and Mokrowous, and, following up his advantages, then laid hold of the woods and other points of shelter between Lubno and Hradek.

Finding the heights of Chlum, Langenhof, Problus, and Prim, strongly defended, and crowned by a numerous artillery, the Prussians became shy of leaving cover, contenting themselves with keeping up a stationary action in this part of the field, while massing strong enough reserves behind the wood of Hola to insure their

grasp on this *point d'appui* lying in front of the important defensive position at Chlum.

Further, the General Reserves, formed of the 5th and 6th Divisions and the Reserve Artillery, were closed upon Sadowa.

The Prussians confined themselves then to opening the engagement, occupying all shelter sites found on the front, advancing to the points where hostile resistance was the most strongly organized, and vigorously maintaining the contest.

It was known at this time that the left wing was compromised; but the hope was entertained that the II. Army would not be slow in arriving, and that the 7th Division would be able to hold out until then.

It has been said since, that the I. Army congratulated itself when it beheld the difficult situation in which this division had become involved, because in drawing upon itself a large force of the enemy, it favored the action of the II. Army, and rendered its thrusts more decisive. This view was justified by the actual circumstances of the case.

In the centre, the commander-in-chief of the I. Army, seeing that the enemy did not think of taking the offensive, temporarily adopted a defensive attitude, and organized his points of shelter in a manner to be able to resist the strokes of considerable masses for some time.

He knew that on the right the scale of advantage clearly inclined to his side.

A misunderstanding occurred, it is true, with reference to the two cavalry divisions, which had the effect of separating them, although great difficulty had been experienced during the preceding days in holding them together. Fortunately, however, for the Prussians, these movements were not attended by any disadvantageous consequences.

In brief, the offensive of the I. Army having been ar-

rested by a resistance which it could not surmount, it awaited the arrival of the II. Army before coming to decisive blows.

Meanwhile the latter, obedient to the orders of the generalissimo, lost no time in setting forward in the direction of the cannonading. The men, stimulated by their officers, made rapid progress. Sadowa had been assigned as the general bearing of the various columns, and intermediate points indicated upon the Trotina. The extreme left corps, the 6th, had reconnoitred the approaches to Josephstadt, and ascertained that the Austrians no longer held strong masses in this quarter. But the strain upon the troops had been considerable; their hardships had been increased by the difficulties met with during the march.

When night approached it was found necessary to call a halt; the Prussians were tired out; several of the officers actually died from the effects of fatigue.

Pursuit under these circumstances was impossible.

4TH.—CONCLUSIONS.

This battle furnishes varied instruction.

Its development presents a succession of events, which, it would seem, must be of regular occurrence in foreseen battles. Its only peculiarity was a clearly defined stoppage in the action of the offensive imposed by the defense.

The fire effect was so murderous on both sides as to plainly betoken the changes needed in combat tactics; and they might at that time have been set down thus:

1st.—Necessity for improved fire instruction.

2nd.—Obligation to accommodate tactics to the requirements of the *terrain*, and to thenceforth profit by all available shelter in advancing to the attack.

3rd.—Just appreciation of the advantages given the defensive by the character of the fire of modern arms,

the moral superiority however still remaining with the offensive.

4th.—Necessity, on the part of the infantry, of abstaining from an advance upon a position until the cohesion of the troops allotted to its defense has been broken up.

5th.—Allowance for the diminished importance of the cavalry upon the field of battle, and recognition of the part which should be taken by this arm in connection with enterprises against the enemy's flanks.

6th.—Lastly, marked extension of the rôle of the artillery, and a proper understanding of the great influence of its fire when employed in large masses.

In particular, the final stage of the battle of Sadowa put in relief the parts reserved for the artillery and cavalry masses in this period of an action.

It fell to these arms here to save the imperial forces. They accomplished their task at the price of bloody sacrifices, but with a devotion and a bravery which ennobled their defeat and gave them an honored place in history.

Although prepared in advance by the generals-in-chief, the battle of Sadowa, as has been seen, left much to be done according to the promptings of circumstances as they arose. This is a law of war and it cannot be otherwise. Therefore it is proper, in our study of foreseen engagements, to seek other examples. For our army, the most instructive combats will for a long time still be those of 1870; and among them, those perhaps in which we were defeated. We were not however always beaten; the victories registered in our favor are few; yet they exist, though they are not perhaps in all cases the best known. Of these actions, there is one which to us is unsurpassed in interest,—that of Coulmiers.

§ 7.—BATTLE OF COULMIERS, NOVEMBER 9, 1870.

I.—Situation of the Two Armies.

At the end of October 1870, the Government of National Defense, undaunted by the check experienced by the 15th Corps and the re-taking of Orleans, had brought together new forces and formed the resolution of wresting this city from the hands of the enemy.

Under the vigorous impulsion of General d'Aurelle de Paladines, the 15th Corps had been re-constituted at La Ferté-Saint-Aubin; the 16th had just formed at Blois. These bodies composed the 1st Army of the Loire; and on the 23rd of October, it was decided, at a conference held at Salbris, that this force should move along the right bank of the Loire to the vicinity of Blois, and thence upon Orleans, while endeavoring to cut off the enemy's retreat. Various circumstances, especially the lack of cohesion characterizing these improvised troops, retarded the movement. However, in the beginning of November, the Army of the Loire was nearly organized, presenting the following composition:—

15th Corps. Commander: General d'Aurelle (general-in-chief).

1st Division. General Martin des Pallières.
19 battalions, 3 batteries, 1 engineer section.

2nd Division. General Martineau des Chenez.
17 battalions, 3 batteries, 1 engineer section.

3rd Division. General Peytavin.
16 battalions, 3 batteries, 1 engineer section.

Cavalry Division. General Reyau.
4 brigades (3 of 2 regiments each and 1 of 3 regiments).

Artillery Reserve. 8 batteries.

Park. 5 train companies and 2 detachments.

Engineer Reserve.

16th Corps. General Chanzy.

1st Division. General Deplanque (commanding the 2d Brigade).

13 battalions, 3 batteries, 1 engineer section.

2nd Division. General Barry.

13 battalions, 3 batteries, 1 engineer section.

3rd Division. General N.*

13 battalions, 3 batteries, 1 engineer section.

Cavalry Division. General Ressayre.

3 brigades of 2 regiments each.

Artillery Reserve. 11 batteries.

Park. 3 train companies and 2 detachments.

Engineer Reserve.†

The 3rd Division, 16th Corps, was not yet formed when the movement upon Orleans was decided on. As to the 1st Division, 15th Corps, under orders of General Martin des Pallières, it seemed designed to form the nucleus for a new corps, and was to take part independently in the operations.

On November 3, these forces occupied:—

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* A method of indicating that a vacancy existed at the time in the chief command of this division.—TR.

† On paper, the battalions were estimated at about 1,000 men each; but these figures do not express the true state of the case. In reality, the effectives were unequal. This arose from a multitude of causes, especially from the difficulties of all kinds which beset the work of organizing the defense in the provinces.

We approach the mark by allowing a mean strength to the infantry brigades of 8,500 men, and to the cavalry regiments of 400 horses.

15th Corps.	1st Division . .	Argent.
	2nd Division . .	Mer and Muides.
	3rd Division . .	Villauton and Chapelle-Saint-Martin.
16th Corps.	1st Division . . .	Saint Léonard and Viévy-le-Rayé.
	2nd Division . .	Mares and Pontijoux.

Pursuant to Gambetta's order of the 5th for a general advance, the concentration of these masses was effected under cover of the forest of Marchenoir, the northern border of which was occupied by our outposts. General d'Aurelle made dispositions to execute his attack about the 8th.

Our movements, and the increased activity displayed to the south and west of Orleans, had not escaped the scouts of the I. Bavarian Corps. The latter, at the time, held this city and its approaches. Its chief, General Von der Tann, wishing to provide in advance against an offensive thrust by which he seemed threatened from the west, on October 22 ordered the following dispositions:—

The 1st Bavarian Infantry Division was intrusted with the guardianship of Orleans, and was also to serve as a support to the 4th Cavalry Brigade in its work of exploring the country south of the Loire.

The 2nd Infantry Division was directed to positions on Les Mauves Creek and behind the railroad from Orleans to Blois, where it was to make face toward the west and south-west. To its 3rd Brigade was assigned the duty of holding Saint-Ay, La Chapelle, and the St.-Jean and St.-Laurent suburbs; while its 4th was to occupy Les Ormes, Coulmiers, St.-Péravy, Ingré, and the Bannier suburbs.

The Cuirassier Brigade, sent forward to St.-Péravy, St.-Sigismond, and Coinces, was until further orders to act with the 2d Cavalry Division in keeping in observation the country north-west of Orleans.

The Reserve Artillery remained at Orleans.

Soon the movements of our columns, the transfer of

our outposts to the north-east of the forest of Marchenoir, and the attitude of the inhabitants of the country, decided the Bavarian general to execute an offensive reconnaissance upon the front of our positions, on November 7. This resulted in the combat of Vallière, in which our troops received their baptism of fire and repulsed the Bavarians, inflicting a loss of 143 killed, wounded, and missing.

This affair kindled the greatest confidence in our ranks.

On the same day, General d'Aurelle gave orders for the army to draw near the German lines, putting it in readiness to take the offensive on the 9th. (*See Plate XIX.*)

The headquarters were moved from St.-Dizier to Poisly.

The 2d Division, 15th Corps, established its 2d Brigade in first line, between Messas and Beaumont; its 1st, in second line, between Villevert and Cravant.

The 3d Division (Peytavin) supported its right on the hamlet of Rilly, near Beaumont; its left, on the Caudray road.

In the 16th Corps, the 2nd Division (Barry) placed its 1st Brigade at the chateau of Caudray; its 2d, at Bizy, toward Mézières, in reserve. The 1st Division, which had passed under command of Rear Admiral Jauréguiberry, posted its 2d Brigade from Bizy to Aupuy; its 1st from Aupuy to Ouzouer-le-Marché.

General Reyau, having all the cavalry under his orders, sent his own division toward Séronville and that of General Ressayre between Gaudonville and Prénouvellon.

The park and the reserve artillery proceeded to Chantôme.

Thus, commencing with the 8th, the Army of the

Loire may be said to have fairly begun its offensive movement. It had debouched to the north-east of the forest of Marchenoir, which up to that time had served to mask its positions, and concentrated upon a front about 12 miles in extent, ready for action.

The troops at General d'Aurelle's disposal may be set down, in *rationnaires*, as follow:—

68,000 foot,
6,400 horse,
204 guns.

In combatants, this force did not exceed 50,000 men.

The projected operation comprehended a principal attack to be executed by General d'Aurelle below Orleans, and a secondary thrust by the Martin des Pallières Division farther up the river, upon the right bank, in the direction of Gien-Orleans.

The march of November 8 was effected without hindrance, under the eyes of the Bavarians, whose leaders did not readily divine its object. They supposed it was our intention to invest Orleans and intercept their line of retreat on Paris.

General Von der Tann gave orders not to abandon Orleans except under pressure of very superior numbers. The intelligence brought him left no doubt as to the importance of our masses. But relying upon the excellence of his experienced troops and the power of his numerous artillery, he thought it expedient to at once accept battle. This furnished him a means of ascertaining the exact condition of our forces; and he had sufficient faith in the efficacy of his own resources to hope even for success, considering that the opposing troops were scarcely organized.

In this view, he had chosen as a field of battle, ground to the west of Orleans, where the line of Les Mauves, the neighboring villages, and the woods in rear, offered him a series of advantageous shelters, and a sort

of defensive front. This position covered his line of retreat on the side of Paris; it was far enough from Gien to allow of a decisive conflict before the arrival of the forces held by us on this side; his infantry could find there substantial points of cover, his artillery open fields of fire, and his cavalry a plain favorable for the action of this arm.

Lastly, the Bavarian general counted upon adopting tactical dispositions which would menace our left wing, and hoped in case of success to cast us back upon the Loire.

His forces comprised:—

First.—*I. Bavarian Corps.*

1st Division:—

1st Brigade, 6 battalions and 6 guns.

2nd Brigade, 4 battalions and 6 guns.

Two battalions were at Mantes with the 5th Cavalry Division, and one at Chartres with the 6th. This division contained, moreover, a regiment of cavalry of 4 squadrons, a group of artillery of 2 batteries, and a company of litter-bearers. Or a total of about—

8,700 combatants, 400 horses, and 24 guns.*

2nd Division:—

3rd Brigade, 7 battalions, 6 guns.

4th Brigade, 6 battalions, 6 guns.

A regiment of cavalry, 3½ squadrons.

A group of artillery of 12 guns.

A company of litter-bearers. Or in all about—

10,900 combatants, 330 horses, and 24 guns.

* These figures are obtained by adopting the following mean effectives:—

A battalion, about	750 men.
A squadron, "	110 "
A battery, "	130 "
A company of litter-bearers	180 "

Artillery Reserve.

7 Batteries of 6 pieces each.

1 Battery of 4 mitrailleuses.

Three batteries had been attached to the 22nd Division then at Chartres.

Cuirassier Brigade.

8 squadrons and 6 pieces.

Total reserves, 8 squadrons and 52 pieces,—about 2,000 combatants.

With the accessory services, the strength of the I. Bavarian Corps may be set down at—

23,700 men, 1,250 sabres, 98 pieces.

Secondly.—*2nd Cavalry Division.*

This force comprised three brigades, each of two regiments, or 24 squadrons and 12 guns, about 3,000 men.

The total strength of the Bavarian forces disposable for the defense of Orleans reached then about 26,700 men.

II.—Prelude to the Battle.

1st.—DESCRIPTION OF THE FIELD.

The ground upon which the battle took place was absolutely flat and open. It offered to the combatants no points of shelter other than villages and farmsteads, and was extremely favorable to fire action. It presented, then, more advantages to the defenders than to the assailing forces.

The Bavarians had made skilful use of the resources of the soil. The combat line selected lay to the west of the woods of Montpipeau and Bucy, its right supported on the village of Saint-Sigismond, its left on Les Mauves Creek, in the direction of Château-Préfort; while its centre was strengthened by two stoutly organized *points*

d'appui,—the village of Coulmiers and the hamlet of La Renardière. In advance of the latter place, the village of Baccon, built on a rounded eminence which seemed to dominate the surrounding country, served well the purpose of an advanced-post. La Renardière was covered to the front by a marshy stream, Les Mauves Creek, which had its source a few hundred yards from this hamlet. These two points, La Renardière and Coulmiers, constituted, with their approaches, positions of pronounced defensive value. They were linked by the chateau and park of Grand-Lus, in which veteran troops would be able to make a prolonged resistance.

2ND.—ORDERS FOR THE COMBAT.

In the afternoon of November 8, General d'Aurelle gave orders to attack on the next day. Reveille was fixed at 5 o'clock, the calls to be omitted; the troops were to set out at 8.

The aim of the movement was indicated as follows: "The object to be attained is the dislodgment of the enemy from Charsonville, Epieds, Coulmiers, and St.-Sigismond, and the execution of a turning manœuvre upon the left in such wise that at the end of the day we may be firmly in possession of the road from Châteaudun to Orleans, while advancing as far as possible in the direction of Les Barres and at the same time seizing all positions necessary to give us mastery of the woods in front of Rosières."

The execution was thus regulated:—

15 Corps.—The 2d Brigade (Rebillard) of the 2d Division (Martineau) was to move its right to a point between Les Monts and Le Bardon and its left to Château de la Touanne. It formed the extreme right of the line of battle. (*See Plate XX.*)

The 1st Brigade (Dariès) composed the general reserve, and was to rejoin the left of the 3d Division toward Thorigny.

The 3d Division (Peytavin), calling at need upon the reserve artillery and the Dariès Brigade, was to attempt the seizure of Baccon and La Renardière.

"If Baccon is strongly occupied, and defended in earnest," says the order, "the general commanding the 3d Division will delay his attack until the reserve artillery of the 15th Corps is up.

"If the castles of La Renardière and Grand-Lus oppose a stout resistance, a pause will be made in the advance until the 16th Corps is in readiness to push upon Coulmiers, when both attacks will be made simultaneously."

The reserve artillery of the 15th Corps was to follow the march of the Dariès Brigade.

The cavalry brigade (Boério) of the 15th Corps was to proceed to the vicinity of Baccon in support of the 3rd Division.

The 16th Corps was charged with executing an outflanking movement against the enemy's right, aided by 10 regiments of cavalry, 6 batteries, and some bodies of franctireurs. The general-in-chief prescribed to all the various forces to keep in constant touch with each other, and to march in several columns so as to insure a rapid deployment.

General Chanzy, commanding the 16th Corps, expanded the instructions sent him, by directing General Reyau to cover the left wing of the army with his two cavalry divisions, taking Patay for his objective point. He was "to keep in careful observation the country in the direction of Paris, without neglecting that toward Châteaudun, in order to guard against all surprise from this side."

The franctireurs of Lieut.-Colonel Lipowsky and Commandant De Foudras were directed to reconnoitre Tournoisis and St.-Péravy at daybreak. They were however to still remain under orders of General Reyau.

To prepare for the attack, the 2d Division (Barry) was to push forward its 1st Brigade, together with two batteries and a mitrailleuse section, by way of Champdry and Villorceau upon Coulmiers, and attempt the capture of this place, at the same time turning Grand-Lus, which was to be seized by the 15th Corps. Its 2d Brigade was to follow the movement at a distance of a mile and a quarter, with three divisional batteries, and one from the reserve artillery (*canon de* 12).

In the 1st Division (Jauréguiberry), the 2d Brigade (Deplanque), strengthened by two batteries and a mitrailleuse section, was to successively take Charsonville, Epieds, and Gémigny, receiving the support of the Liénard franctireurs upon its left.

The 1st Brigade (Bourdillon), with 3 batteries and a mitrailleuse section, had orders to quit Ouzouer when the other brigade had passed Charsonville, follow it at an interval of 2½ miles, and serve as reserve to the left wing of the army.

Lastly, the corps reserve artillery was directed upon Charsonville, with instructions to hold itself abreast of the 1st Brigade, which marched upon its left a little more than half a mile away.

While General d'Aurelle was engaged with these dispositions, his adversary, thoroughly enlightened by the cavalry, and having no doubt as to our intentions, at 7 P. M. of the 8th dispatched the following orders:—

"The 2d Infantry Division will place itself astride the Ouzouer road, between Montpipeau and Rosières;

"The 1st Infantry Division, in rear of the 2nd;

"The Artillery Reserve, at Les Barres;

"The 4th Cavalry Brigade will move from the left bank of the Loire to St.-Sigismond;

"The 2d Cavalry Division will continue on observation duty."

The last clauses in the instructions seemed to have

been intended to provide for the case of a retreat. They directed the dispatch at midnight of railroad material and a detachment of telegraphists to Artenay. A regiment of infantry was left at Orleans to serve as a rear-guard in case of need.

General Von der Tann afterwards, at 11 P. M., moved his headquarters to Ormes.

On both sides, then, the battle was premeditated in the extreme sense of the term; and yet the field for the play of the unforeseen was so large as to leave the result in doubt up to the moment of the decisive act.

3RD.—FIRST ENGAGEMENTS.

Between the morning hours of 5 and 6 on November 9, 1870, the Bavarians took up their assigned positions:

The 1st Infantry Division, at Descures Farm;

The 2d upon the line Rosières, Château-Montpipeau; —both astride the high-road.

The 2nd Division had detached—

A rifle battalion to Huisseau, La Renardière, and Baccon;

A battalion to Château-Préfort;

A squadron to St.-Ay, observing the Meung road;

A battalion to St.-Péravy;

A battalion to Coulmiers;—posted there the evening before for the purpose of putting it in readiness for defense;

A rifle battalion to Rosières, also in position on the 8th.

The Cuirassier Brigade, concentrated at St.-Péravy, observed the ground to the front.

The Reserve Artillery was at Les Barres.

The 2d Cavalry Division took stations as follow:—

The 3d Brigade and two battalions, to the west of La Rivière;

The 5th Brigade, at Coulmiers;

The 4th Brigade, which had set out from its cantonments southward of Orleans at 11 P. M., was at St.-Sigismond.

Patrols of the 3d and 5th Brigades watched the space between the two armies.

At daybreak, General Von der Tann took post at Château-Huisseau, accompanied by the commander of the 2d Cavalry Division, in order to observe our movements and to be in quick receipt of intelligence.

Meantime, the general commanding the 2d Infantry Division, in expectation of a speedy attack, had, between 8 and 9 A. M., moved his 4th Brigade, only 5 battalions strong, into a defensive position at Coulmiers and vicinity.

The houses of this village were of stone, and it contained a massive chateau. On its south-west side, the quarter exposed to hostile thrusts, was a large park, girt by a thick, growing hedge, in front of which was a ditch. This chateau and park formed the defenders' principal point of support. Les Crottes Quarries, 800 metres west of Coulmiers, and Ormeteau Farm, 900 metres to the north, completed this position, which was held by the 4th Bavarian Brigade as follows:—

At the park of Coulmiers, two battalions: one upon the outskirts, holding a company at the quarries, the other in reserve.

In the right wing, a rifle battalion occupying Ormeteau Farm, and the copses and gravel-pits in the vicinity.

Northward of Coulmiers, and near the outmost houses on the east, two battalions in reserve.

At the north-east corner of the park, northward of the road, two batteries of six pieces each.

Another battery in reserve, with two squadrons, in rear and to the north of Coulmiers.

These troops, mustering an effective of about 4,300 men, were in position at 9 A. M., and had finished the defensive organization of their various localities.

Almost at the same instant, General Von der Tann, at Huisseau, was warned that strong columns were moving from Meung, by way of Cravant, in the direction of Baccon. No news had yet reached him from the north. He hence concluded that our principal attack was to be made along the line of Les Mauves Creek, and therefore resolved to remain upon the defensive on the left, and execute a turning manœuvre toward the south with his right, with Coulmiers as a starting point. Events were soon to lead to a modification of these first views. But, in the meanwhile, the Bavarian general, coming to an immediate decision, ordered:—

The 3d Infantry Brigade, to move upon Huisseau and Château-Préfort, and defend these places against attacks coming from the west or south, covering thus the road from Tours.

The 1st Brigade, to occupy La Renardière, and to assume a combat formation. This brigade had present only a regiment and 4 guns; the other regiment remained at Orleans with 2 guns.

The 2d Brigade, to hold the Coulmiers road and serve as a reserve.

If it was found feasible to take the offensive, the movement was to be made upon Mer. In case of a reverse, the design was to effect a retreat upon Artenay.

The regiment left at Orleans had orders to set out for La Chapelle at the first sound of cannon, and connect with the 3d Brigade at Château-Préfort.

The Reserve Artillery was to march upon Huisseau.

The Cuirassier Brigade at St.-Péravy, with its two batteries and its supporting battalion, as well as the 4th Cavalry Brigade, were to be installed at Coulmiers.

In the last place, word was sent to the 22d Infantry Division at Chartres that the battle was about to begin.

This distribution of the forces, as we see, rested on a faulty hypothesis; it presupposed the intention on our

part of making the principal attack against the line of Les Mauves Creek. Therefore our first movements were not slow in leading to an alteration in the dispositions decided on by the enemy, some of which were to remain dead letters. Thus when our masses advanced in the direction of St.-Sigismond, it became essential that defense be made at this point, and as a result, which will be seen further on, the Cuirassier Brigade, the two batteries, and the supporting battalion, were left at St.-Péravy.

In brief, the Bavarian line of battle extended from St.-Sigismond to Château-Préfort, a distance of about 8 miles, which was occupied by three weak infantry brigades and a cavalry division. This was a large space for the effectives disposable for the defense. But in reality the resistance was centered in the portion of the line extending from La Renardière to Coulmiers, or upon a front of only a little over 3 miles.

Pursuant to the orders received, our troops were set in motion at 8 A. M.

On the right, the 2d Brigade of the Martineau Division took post between La Touanne and the hamlet of Les Monts, without encountering opposition. From the chateau of La Touanne, General Martineau was able to make out the movements in process of execution by the enemy upon Les Mauves Creek; but, in accordance with his instructions, he still held his troops in their positions.

On the left, the combat was to kindle by an attack upon Baccon. The 3d Division (Peytavin) of the 15th Corps was marching toward this point. The general-in-chief, who was advancing with it, had just reached Champdry.

Baccon and La Rivière were defended by a rifle battalion, supported by four batteries, one north and a second south of Baccon, the others in rear between Grand-Lus and La Renardière.

As soon as the first column of the Peytavin Division had passed Les Blanchets, the guns at Baccon opened upon it. To respond to this fire General d'Aurelle immediately established two batteries to the east of Champdry. Then, not seeing any effect produced, he adopted a tactical disposition, which since the commencement of the war had contributed in great measure to the success of the Germans,—he moved into line three reserve batteries (*canon de 8*). These opened fire at a distance of about 2000 metres from the enemy, and one of them advanced upon the left to within 1100 metres, consequently quite close to Les Bréaux.

Meanwhile our skirmishers had become engaged, supported by two batteries (*canon de 4*), which accompanied the 1st Brigade and which at about 11 o'clock unlimbered, one at Gléneau Farm, the other between Prenay and Les Bréaux. Shortly afterwards, the Bavarian batteries, unable longer to continue the contest, withdrew from Baccon. The fire of the defending infantry soon began to droop in turn, and, a little later, flames burst forth from the place. Our officers, seizing this favorable occasion, led forward their men upon the village, which now fell into our hands. The enemy retired upon La Renardière, under the protection of his batteries.

III.—Development of the Action.

After the capture of Baccon, the Peytavin Division found itself brought under such a vehement artillery and infantry fire that an immediate attack was impossible. Moreover the chateau and park of La Renardière were obstacles difficult to seize.

Separated from Baccon by Les Mauves Creek and by the houses of La Rivière, that covered the approaches thereto, the park was surrounded by a thick, high wall, which was protected on the south side by a deep, water-

filled ditch, 2 to 3 metres wide. To the south-east, a small sheet of water shielded the avenues to the castle, which formed a solid reduit capable of offering a stout resistance. Lastly, to the east, a wood 600 metres in extent covered the communications of the Bavarians. Well defended, this position could have been maintained for a long time, and the progress of our recruits thereby arrested.

1ST.—ATTACK OF LA RENARDIÈRE.

This place and the approaches to it, were held by four well-sheltered battalions of infantry, against which about eight opposing battalions of the Peytavin Division were to advance in the open. On account of the difficulties of the situation, the artillery was to be brought into play in the first instance. Two reserve batteries took station to the north of Les Boynes Farm, and the two divisional batteries (*canon de* 4), to the south-east of Baccon. Under the fire of these guns, and that of our skirmishers, who had advanced to the first folds of the ground, the houses of La Rivière were soon in flames, and as the enemy retired, our troops occupied the place. The defense then centered in the chateau and park. Our reserve batteries brought their strokes to bear upon the walls on the north side of the park, while the remainder of the Peytavin Division, gaining ground to the right, began a turning movement by the south, between La Grande-Motte and Viard Farm. The enemy then shifted a battalion to the south side, and retired the 3rd Cavalry Brigade, as well as two batteries.

General d'Aurelle had perceived various movements which led him to believe the enemy intended a counter-offensive. To frustrate this design, he posted a reserve battery at St.-Christophe Farm, which directed its blows against the right of the Bavarian batteries placed north of the park, inflicting such serious loss as to oblige

them to fall back. Our guns then took for their target the walls inclosing the park. Soon two breaches from 6 to 8 metres in length were made, and the abatement of the enemy's fire seemed to indicate an end of resistance here.

General Peytavin and the battalion commanders, again leading forward our young troops, launched them, with bayonets fixed, upon the park. At about 12:30, the position of La Renardière fell into our hands, and the 1st Bavarian Brigade, repulsed, beat a retreat toward the wood of Montpipeau, where it was rallied by the 3rd Infantry Brigade. The latter, sent at first to Château-Préfort, had received a counter-order as soon as General Von der Tann discovered that our attack was not coming from this side. He then directed it upon La Renardière ; but not being able to reach this place, it restricted itself to covering the withdrawal of the punished troops.

The capture of La Renardière was of very material advantage. It rendered untenable the line of Les Mauves, and made the further occupation of Grand-Lus dangerous. General Peytavin would indeed have continued his forward march ; but, responsive to the orders received, he stopped his offensive movement upon seeing that Coulmiers was still in possession of the Bavarians, and limited his action to making good his footing on the point already held.

2ND.—ATTACKS UPON COULMIERS AND CHEMINIERS.

While our right was reaping these successes, the 1st Division (Jauréguiberry) of the 16th Corps had left Ouzouer-le-Marché at 8 A. M. and moved upon Charsonville.

The 2nd (Barry) had in like manner quitted the chateau of Coudray at 8, and set forward in the direction of Coulmiers, by way of Champdry and Villorceau. These two divisions followed the prescribed line of march up

to 9:30 o'clock. At this time the sound of General Peytavin's artillery became audible to their heads of column. That of the Barry Division had scarcely debouched from Champdry when it was taken in flank by the shells from the Bavarian horse battery placed north of Baccon to reply to the reserve batteries advanced by General d'Aurelle.

These projectiles brought the first companies of the Barry Division to a stand, the commander sending a report of the situation to the general-in-chief, who ordered a continuance of the march. A certain space of time was thus lost, during which, however, Admiral Jauréguiberry did not fail to make progress. At 10:30 he reached Saintry, accompanied by General Chanzy, when he was informed that Coulmiers was strongly held, and that General Barry had suspended his advance. It was assuredly impossible to lead the troops of the 1st Division farther to the front while the 2nd Division remained in rear. The Admiral was obliged to halt for an instant. General Chanzy, in order to aid in the resumption of the forward movement, posted a battery upon the Grand-Lus road, with directions to engage against the Bavarian battery at Baccon. This diversion contributed indeed toward enabling General Barry to again take up his march to the front, and to reach Saintry, which was gained at 12:30 o'clock. The Admiral in the meantime had cleared the ground, and moved northward upon Epieds and then towards Cheminiers.

Immediately upon arriving at Saintry, General Barry pushed three of his batteries into line to the east of the village, on both sides of the road, and began the attack upon Coulmiers. His battalions deployed as skirmishers and entered into action.

The cavalry outposts of the enemy had noted the march of our columns at 10 A. M. The defenders of

Coulmiers stood ready to open fire at the proper moment. The issuing of our troops from Saintry furnished them a signal for brisk discharges.

But soon the sight of the Jauréguiberry column advancing upon Cheminers, gave cause for fearing a turning movement against their right. One of the reserve battalions was forthwith dispatched to Vaurichard, together with the 5th Cavalry Brigade then in rear of Coulmiers; and at the same time a reserve battery was called into line between Ormeteau and Les Crottes Quarries.

To complete these dispositions, the 2d Infantry Brigade, in reserve at Bonneville, was directed upon Champs, together with the 4th Cavalry Brigade, which was *en route* from St.-Sigismond to Coulmiers.

While these measures were in course of execution, Admiral Jauréguiberry, toward 11:30, established his batteries between Epieds and Cheminiers, near Villevoindreux, and deployed the Deplanque Brigade as skirmishers in the direction of Ormeteau and Vaurichard. Scarcely was fire opened when the Bavarian batteries at Gémigny and St.-Sigismond entered into action. On our left, the first *rencontre* between General Reyau's patrols and bodies of Bavarian horse had taken place early in the morning at Renneville. Our cavalry regiments then continuing the march, had finally deployed between Champs and La Vallée. They were in position here when the brigade of Bavarian cuirassiers, in movement from St.-Péravy upon Coulmiers, and in the act of debouching from Coulimelle, perceived them. It at once dispatched a battery to open fire to the south of La Haie. Two batteries of the Reyau Division responded; a second Bavarian battery established at Porcheresse was drawn into the action, and a sustained cannonade between these two groups followed. The combat continued in this way until nearly 1 o'clock.

Thus, by the middle of the day, the struggle in progress from Coulmiers to La Renardière, upon a front of about 7½ miles, had reached full development. On our left from Champs to La Haie, and in the centre between Epieds, Cheminiers, and Coulmiers, the combat was maintained with vigor. On the right, Baccon, La Rivière, and La Renardière had been seized and occupied by the Peytavin Division.

IV.—Decisive Act.—Capture of Coulmiers.

The contest had been carried on with the greatest energy up to 2 P. M.; in front of Coulmiers, especially, it had assumed a deadly character, and our forces felt that this point was to become the scene of the decisive action.

After having brought his troops into line and aroused a lively enthusiasm in their ranks, General Barry had compelled the Bavarians to evacuate Les Crottes Quarries—an event which compromised the position at Ormeteau. The park at Coulmiers now became his principal objective. The Bavarians had called up all their supports save a single battalion, which constituted a last reserve; and although their fire did not diminish in intensity, General Barry believed that the time had arrived for pressing home his attack. He formed three columns, which advanced in succession against Coulmiers by the north and south. But the adversary had not been so severely bruised as to be forced to renounce his position; the reserve battalion was summoned up; three batteries unlimbered on the road from Ormeteau to Les Crottes; and, lastly, the 5th Cavalry Brigade made offensive demonstrations. These various movements and the fire poured upon us, had the effect of checking our advance, although our troops were able to retain a fast hold of the ground already won. Meanwhile General Chanzy had pushed forward the 2d Brigade of the Barry Division;

the General-in-Chief had dispatched to Grand-Lus two reserve batteries and the Dariès Reserve Brigade; and General Peytavin had been directed to renew his offensive from the south-east of the park of La Renardière.

To oppose this attack, the 3d Bavarian Brigade moved three batteries to the west of La Plante; five battalions took post along the border of the wood of Montpipeau; and two horse batteries of the 2d Cavalry Brigade came into position at La Motte-aux-Taurins. Finally, General Von der Tann formed a new reserve at Bonneville with the 3d Cavalry Brigade and the troops that had been expelled from La Renardière.

In consequence of these dispositions, five of the enemy's batteries were in line between Coulmiers and La Plante, contending against an equal number on our side, two of which had unlimbered between Le Clos and Hotton, one between the latter place and Petit-Lus, and the remaining two, between Grand-Lus and Champfère. To the north of the high-road, 4½ Bavarian batteries were in action against 4 of ours established, 2 eastward of Champfère and the others in the same direction from La Leu.

The guns were then in even balance; but the position of our artillery, thanks to the conquered ground, gave it an advantage, which was enhanced by the heavy calibre of our reserve pieces. The effect of this was soon visible. The Bavarian battery stationed to the south of Coulmiers park, overwhelmed by the blows of our two reserve batteries at Grand-Lus, was forced to withdraw toward La Motte-aux-Taurins; and the hostile batteries held to the north of the park, now sorely tried, were compelled to fall back in their turn. At the same time, the fire from the edge of the park appeared in a measure to droop. The moment for the decisive attack seemed to have arrived.

General Barry forthwith gave orders for a renewal of

the advance upon Coulmiers. The 3rd Battalion of *Chasseurs à Pied*, the 31st Marching Regiment (Colonel De Folonges), and the 22nd Mobile Regiment (of La Dordogne), were to execute the movement. A column of 4 battalions (31st Marching Regiment and the 3rd Chasseur Battalion) was directed toward the south of the park, while the 22nd Mobiles attacked in front. Our soldiers were received by a vehement fire, which produced a wavering in their ranks. But General Barry dashed to the front, and with sword uplifted, and uttering the inspiring cry of *Vive La France!* led them forward. (*See Plate XXI.*)

The Bavarians gave way before this onslaught, abandoning the park, which was at once occupied. They then fell back upon the gardens and into the village; but hotly pursued, and soon outflanked on the south, they released their grasp on the position, and withdrew toward the wood of Bucy. At 4 P. M. we were masters of Coulmiers. Three of our batteries moved to the north of the village, and trained their guns upon Rosières and Gémigny, in order to frustrate any attempt at a counter-stroke; while those at Grand-Lus rained their projectiles upon the Bucy-St.-Liphard road and the columns retreating by this way.

V.—End of the Battle.

During the attacks on Coulmiers various events were in progress on our left.

At the moment the Deplanque Brigade began its movement upon Cheminiers, it became a plain target for the guns at St.-Sigismond, Gémigny, Rosières, and Coulmiers, which simultaneously opened fire. It was obliged to call a halt at Cheminiers. Here it caught sight of the forces which the enemy had directed upon Vaurichard, consisting of the 2nd Infantry Brigade and

two batteries. Admiral Jauréguiberry then concluded that to flank the German right, he would have to extend much farther to the north, and even endeavor to gain Gémigny. He therefore directed toward Champs the Bourdillon Brigade, which had arrived upon the scene.

But at the same instant, toward 2 o'clock, the 2nd Bavarian Brigade entered into line, deploying its infantry between La Mouise and Vaurichard; the 4th Cavalry Brigade advanced from St.-Sigismond toward La Mouise; and four batteries came into action against the three which we held at Villevoindreux, speedily inflicting serious loss upon them.

At this time General Reyau's cavalry regiments withdrew from Champs upon Cheminiers. General Chanzy ordered them to debouch between these two places. Upon espying them, the enemy's squadrons and four of his batteries came forward at a trot, but they were brought to a stand by the fire of the Deplanque Brigade. Far from attempting pursuit, our cavalry contented itself with manoeuvring to avoid the enemy's shells; then, upon receiving news of hostile columns to the westward, it quitted the battle-field and moved off in this direction.

Our adversaries straightway resumed their post at St.-Sigismond, and, covering Champs with their fire, forced the Bourdillon Brigade out of the place. The 2nd Bavarian Brigade, believing the circumstances now propitious, at once moved forward to attack Cheminiers. The Admiral saw the danger, and hastened to put himself at the head of his young troops. These, thanks to him, held their ground. General Chanzy, who from his position had promptly interpreted the situation, sent the Admiral the reserve batteries, which, from the north of Cheminiers, took the Bavarian guns under fire, and obliged them to withdraw.

The Bourdillon Brigade, engaging in turn, gave us the advantage; and at 5 o'clock our superiority was so pro-

nounced as to force the enemy's troops to retire. Soon the latter learned of the capture of Coulmiers, and in consequence could think only of remaining on the defensive to protect the retreat, which Van der Tann had just ordered.

This was executed as follows:—

The defenders of Coulmiers retired in echelon towards Gémigny, shielded by the artillery. The two brigades of the 1st Bavarian Division and the 4th Cavalry Brigade, were obliged to retreat by way of Coinces and Songy upon Artenay, where they arrived at midnight.

To the 3d Cavalry Brigade and the Bavarian Cuirassier Brigade, posted at St.-Sigismond, was allotted the task of covering the withdrawal of the right wing and the Reserve Artillery. The latter gained the road to Patay.

Lastly, the rear-guard was formed by the 3d Infantry Brigade, and the 5th Cavalry Brigade reinforced by a regiment. These troops, in fulfillment of their mission, were directed from the wood of Montpipeau upon the space between St.-Sigismond and Gémigny.

Coming to the garrison of Orleans, it had moved out to Château-Préfort, where it learned of the departure of the 3d Infantry Brigade, and received orders, at 4:30 P. M., to beat a retreat *viâ* Ormes upon St.-Péravy.

The battle was ended. The Army of the Loire, despite its inexperience, after having gained an advantage over the enemy in the combat of Vallière, had now given France her first victory.

VI.—Comments.

1st.—EFFECTIVES AND LOSSES.

The Germans have officially given their casualties at 783 killed, wounded, and missing,—figures which for a combatant force of 21,500,* give a proportionate loss of

*This statement of the combatant strength of the force engaged here is taken from German accounts.

3.6 pr. ct. Deducting the missing, or 193 men, there remain 590 killed and wounded, or 2.7 pr. ct.

These losses were inconsiderable. They show what advantage may be drawn from well-organized points of shelter. They also seem to denote that but a moderate degree of energy was displayed in the resistance.*

In our army, the 15th Corps suffered a loss of about 500 killed and wounded; the 16th Corps, 1064 in all, of which 220 were missing.

Our total casualties were then about 1564 men, or 3.1 pr. ct. of the 50,000 combatants engaged.

For young troops without military training, this was a most honorable result,—one indeed of which they might justly be proud.

2ND.—STRATEGIC CONSIDERATIONS.

From a strategic point of view, the movement of our forces upon Orleans presented a capital defect. Instead of concentrating the entire available troops in the same hand and bringing them against the enemy upon a single line of operations, the forces were divided and a double operating line adopted. The 1st Division of the 15th Corps, with an effective equal to an entire ordinary corps, had been assigned the duty of attacking the adversary from the direction of Gien. It arrived on the scene too late. The Bavarians had evacuated Orleans, and the troops of General des Pallières exercised no influence whatever upon the result of the action.

This distribution of forces was in opposition to strategic rules, and the 1st Division had to submit to the consequences. Unfortunately, these also affected the whole army and the country. The intoxication of success for a long time prevented this from being perceived. But

* Hugo Helwig, on Von der Tann's staff, puts the German losses at 573 killed and wounded, and 735 missing, or in all 1308 men.

it is not doubtful that with twenty battalions more in hand, General d' Aurelle would have extended his movement farther to the left, thus outflanking the enemy and grasping his line of retreat. The safety of the 1st Bavarian Corps might have been very seriously compromised; and if the battle of Coulmiers was not attended by more decisive results, the fault evidently lay with our combinations.

3D.—TACTICAL CONSIDERATIONS.

From a tactical standpoint, the selection of a defensive position made by the Bavarians was as judicious as the character of the *terrain* permitted. It offered one striking peculiarity,—its extent. Notwithstanding accepted rules, it is to be observed that the Germans did not hesitate, with rapid-firing, long-range arms, to develop their front beyond the limits corresponding to their effectives. This disposition none the less had the effect of producing weak sections in the line of battle beyond the organized defensive points. Moreover, the troops were scattered.

Turning to our side, the orders given by General d' Aurelle were characterized by remarkable precision, and this feature led to an execution with which eye-witnesses were forcibly impressed.

The most salient tactical circumstance of the action sprang from the use made of the artillery. In this respect, the battle of Coulmiers marks, in the war of 1870, a progress in the improvement of this arm which contributed much to success, but which has not perhaps been brought into sufficient prominence.

Following the traditions of the First Empire, as General De Blois has pointed out, and failing to take into account the improvements made in arms, we in 1870 still observed the practice of opening the combat by engaging with a line of infantry, supported by field-guns. The

commander, according to this system, sought to throw the ranks of the enemy into disorder; then, when the moment for striking decisive blows seemed to arrive, he called up the reserve artillery and next his other disposable reserves, and made an effort to thus lay hold upon victory.

At the period we are considering, the essential tactical differences between the Prussians and ourselves were: The possession by them of a more numerous and more powerful artillery; their plan of holding the infantry under cover in the first period of the combat, because its employment at this time could bring about no useful result; of opening the battle by an effort to dismount our guns; of then shaking the opposing infantry lines by formidable discharges of canister; of executing at the same time a turning movement upon a wing, with reserves up to this point hidden from view; of pushing into action new masses of artillery, particularly upon a flank; of thus producing a state of more or less confusion in the adversary's lines; of bringing his fire measurably under control, and, finally, launching the infantry upon him, when it was almost certain of deciding the day.

This method of employing the various arms, and especially the artillery, at the commencement of the contest, assured the Prussians great advantages. In the first stage, our guns were overpowered in detail; after this, our infantry, exposed to a destructive fire, soon found itself out of condition to attempt offensive action, and was finally shaken. The enemy's infantry then came forward *en masse* to complete the success. Up to this time our adversary considered it expedient to mask his forces, that they might be sheltered from our blows, that we might be unable to form an estimate of their strength, and especially because they were not yet to take an active part in the struggle.

There was but one way of replying to tactics of this character,—to bring the reserve guns into line at the outset, with the divisional batteries, and to respond to the hostile masses of artillery by other masses of the heaviest calibre pieces at disposal.

This, it is true, would be to expose the forces to the hazards of battle, deprived of a reserve of this arm,—a circumstance much to be deplored; but it would be better to transgress in this particular, than to condemn them to almost certain defeat.

This fact was appreciated at Coulmiers.

"It is beyond question," wrote General De Blois, chief of artillery of the 15th Corps, "that the resistance at Baccon and La Renardière was more quickly overcome than would otherwise have been the case, in consequence of the measure adopted by the general-in-chief in bringing the reserve artillery to the front before the reserve infantry was called up."

The conclusion to be drawn from this, is that in future it will be indispensable to have a superiority in artillery at the beginning of a contest. This will be the surest means of being in condition, during the course of the engagement, to frustrate the attacks of the enemy's infantry or to overcome its resistance, and to take the offensive with promise of success.

The infantry tactical formations during the action of Coulmiers merit an examination. In the 16th Corps the divisions moved to the combat formed in lines of battalions in double columns at deploying distance. Each main infantry line was preceded by two chains of skirmishers: the first at a distance of 1200 metres, the second at 600 metres. The reserves were held in rear of the intervals separating the battalions. The squadrons attached to the divisions, moreover, maintained a line of scouts 500 metres in advance of the skirmishers. The divisional batteries were disposed:

two in the intervals between the battalions, upon the most favorable ground; the third, in rear of the line.

This was really a combat formation, and not a preparatory disposition. It had the advantage of avoiding the hesitation that would have been produced among our inexperienced troops, had it been attempted to pass from the one formation to the other under the enemy's fire. The soldiers had the benefit of touch of elbow at the stage of the action when their *morale* had the most need of being sustained, and they saw that they were strongly supported.

General Chanzy had no doubt correctly appreciated, in this regard, the qualities of the ground, which being level, was most favorable for the adoption of these formations. In reality the Army of the Loire here applied, under the pressure of events, the principles of the dispersed order.

Finally, we are to examine, in its tactical bearing, the part taken by our cavalry.

General Reyau had under his command, aside from his own division, that of General Ressayre, in all, 11 regiments. The Tillion Brigade (2 regiments) having been left in observation at Prénouvellon, there remained only 9 regiments, which were disposed as follow:—

In 1st line, the 7 regiments of the Ressayre Division;

In 2d line, 2 regiments of cuirassiers.

The artillery was placed in the centre of each brigade.

In the right wing, a squadron of hussars, deployed as skirmishers, connected General Reyau's command with the left of Admiral Jauréguiberry's. Upon the front were three squadrons acting as skirmishers.

This force of cavalry had set out from the neighborhood of Séronville and Prénouvellon, the first line deployed, the regiments of the second line in close column. The centre was to march *viâ* Favelles, Présailles, Villemares, and Tournoisis, upon Patay. But in order to

remain linked to the rest of the army, General Reyau modified the direction, inclining toward the east. The centre moved then by the points Villemain, Villiers-le-Temple, and Cerqueux.

Upon reaching the last-named village, the enemy's foremost vedettes were encountered, and the cannonading which had begun on the right, was now audible. It was about 10 A. M.

When not farther than 200 metres from Champs, this cavalry was exposed to the fire of the batteries at Coulimelle. Our scouts fell back, and General Reyau, toward 11:30, brought into line the 16 guns at his disposal, without however putting his squadrons under cover.

In a little while, these horsemen were put to the test; it became necessary for them to refuse the left wing, while the right advanced between St.-Sigismond and Gémigny, with a view to intercepting the enemy's cavalry visible at Coulimelle. This combination drew our regiments between two fires,—from St.-Péravy and Gémigny. We were nevertheless able to occupy St.-Sigismond; but the losses to which our cavalry had to submit, did not permit our hold upon the place to be retained. It became necessary to fall back, and General Reyau indicated Nids as the direction of retreat, to the end that the Châteaudun road might be kept under observation. But he uncovered our left, which was to be reinforced by the Bourdillon Brigade.

We have seen that later in the day, General Reyau extended a helping hand to the Admiral for a brief period; but that toward 5 o'clock, upon the announcement of the approach of strong hostile columns from the west, he returned to his positions of the morning at Villamblain, and sent forward a regiment to reconnoitre. The troops that had created this alarm were none other than the Lipowsky *franctireurs*, which were under orders of General Reyau himself.

The result of those false movements was to prevent our cavalry from fulfilling its assigned rôle. It was in consequence unable to outflank the enemy, or to turn him in the direction of Patay. The fault lay in an unskilful management of the elements composing this force. Instead of awaiting, between Champs and St.-Sigismond, the result of an artillery combat which was a matter foreign to its sphere, it should have moved against the enemy's horsemen distinguished near Coulimelle. These, we must believe, it was in condition to drive in, when we consider its numerical superiority, and the assistance which, at need, could have been rendered it by the very *franctireurs* which it had compelled to withdraw from the scene.

The part allotted to our cavalry permitted the dispatch of a regiment on reconnaissance service in the direction of Châteaudun; and it imposed as an obligation the support of the left of the Deplanque Brigade, at the same time that the region between Cheminiers and Renneville was reconnoitred and the *franctireur* force sent forward upon St.-Péravy. As soon as the struggle was rife in the centre, it became the duty of this cavalry to develop its movement upon the enemy's right. If St.-Péravy had been occupied, the retreat of the Bavarians would have been compromised and the consequences of the action would, no doubt, have been much more important. Despite the lack of solidity among our squadrons, it was reasonable to expect this result, in view of their numerical strength, and the means of action at their disposal.

The tactical events that decided success were the capture of La Renardière and Coulmiers.

We have already seen that the taking of the former place was principally due to the fire of the reserve artillery, combined with a turning movement against the left of the position; then to an attack, well prepared for, and carried out at the opportune moment, by General Pey-

tavin's infantry. Coming to the capture of Coulmiers, it must be attributed to our numerical superiority and to an outflanking thrust from the south. Perhaps it would have been preferable to have first gained possession of Ormeteau, which would have rendered useless the further defense of Les Crottes Quarries, and afterwards have cannonaded Coulmiers park with the batteries that could have been trained on it from that point, and which would have crossed their fire with those at Grand-Lus and on the Saintry road.

Under these circumstances, it is probable that the initial attack of General Barry's infantry would have met with prompt success.

In the last place, it is a matter of regret that the mistakes committed by our cavalry prevented pursuit on the next day, the 10th. Lieut.-Colonel De Lambilly of the staff, at the head of a small body of horse, seized two field-pieces indeed. But if the Reyau and Ressayre Divisions, supported in rear by an infantry brigade, and accompanied by their artillery, had been in condition to move upon Artenay, they would probably have been able to gather other trophies. Efforts in this direction were prevented by the fatigued state of men and horses, and by the erroneous hypothesis of a counter-offensive on the part of the enemy.

4TH.—CONCLUSIONS.

To recapitulate, the battle of Coulmiers shows that with modern weapons, young soldiers, meagerly trained but vigorously commanded, and supported by skilfully managed artillery, may, with a numerical superiorty, defeat veteran troops.

The necessity of producing a powerful effect with the artillery in the beginning of the engagement has been clearly demonstrated. Henceforth it will be one of the secrets of victory; and an intense infantry fire at the

same stage of the contest will be a not less useful factor. But it is certain that, in the future, attacks on the part of the latter arm may be successfully delivered only after the artillery of the adversary has been weakened and the shelter of his infantry rendered unserviceable.

Finally, it is proper to note that the defender was forced to abandon his designs and beat a retreat.

Notwithstanding the youthfulness of our troops and the errors committed in the left wing, Coulmiers remains an interesting and instructive example of a premeditated battle. The result that crowned the action may be considered a testimonial to the valor of young men yet untrained in the trade of the soldier, and especially to the energy and skill of the leaders. Attempts have been made to minify the importance of this battle: this was a mistake and a danger. Coulmiers was indeed a victory, and it does not stand alone in the war of 1870, whatever may have been said to the contrary. The truth in this regard would be the better understood if our natural defects did not frequently lead us into extremes in our estimates alike of defeat and success.

§ 8.—DEFENSIVE BATTLES.

1ST.—GENERAL CONSIDERATIONS.

Defensive battles are always foreseen engagements. They constitute the principal act in defensive operations, and are subject to tactical conditions which impress upon them a special character. They should then be the subject of a separate study.

Since the last wars, particularly since the victories of the Germans, it has become generally recognized that the offensive alone has chances of success; that the defensive, alike upon the field of battle and in the operations taken as a whole, can lead only to reverses. This

rule has already been fully illustrated in these pages, and upheld, from a strategic standpoint, as the only one in this regard which, generally speaking, is suited to a well-commanded army.

From a tactical point of view, the principle is not less true. Yet the defender has, especially with reference to fire effect, certain advantages which may very frequently lead in turn to success, if his troops are able to push forward upon the enemy at the opportune moment, and if the moral influence of the offensive army has not to a great degree paralyzed his power of action.

At St.-Privat, if Marshal Canrobert had been able to throw a brigade of fresh troops upon the 1st Division of the Prussian Guard at the moment when our fire had brought it to a stand-still, he would no doubt have succeeded in driving it in.

At Plevna, after the failure of the first attempts on the part of the Russians, if the Turks had possessed the power of taking the offensive, they would probably have changed the face of the situation.

There are conditions, therefore, under which the defensive can and should carry the day. Some of these are dependent on the ground and the manner of making use of it; others arise from the combat methods employed.

The first relate then to the positions chosen for defense.

Upon this subject, about everything has already been said that can be said; and one can not do better than to recur to the principles set forth for the instruction of our army by Generals Lewal and Berthaut.

It is proper, however, to remark that modern arms have modified, in a certain measure, the rules in vogue up to the present for the occupation of positions. It will not then be unprofitable to present, in a few words, the principles which will probably be henceforth held to in this connection.

2ND.—DEFENSIVE POSITIONS.

The preparation of a defensive battle always includes the selection of the position, consequently its reconnaissance and occupation. Touching reconnaissances, the principles are known, and it will therefore be unnecessary to recall them. The points upon which they should bear, are moreover brought into relief by a study of the most favorable conditions for the occupation of the chosen site. What are these conditions? The end to be attained indicates them.

It is not alone for purposes of defense that a force takes up a certain position; but more especially to be able to convert its first attitude into one of offense at the proper moment, that is when the adversary has been sufficiently shaken; if it has not this in view it is lost in advance. This force cannot attempt to destroy the opposing masses by an offensive movement at the outset, on account of its numerical inferiority or from other causes. It seeks then in the resources of the ground the means of counterbalancing this inferiority and of being in readiness for grasping a favorable chance of success. In a word, it is necessary for it to first of all beat down the strength of the enemy; then to attack him with the greatest possible energy.

The former result will be reached if the adversary can be led to make successive and incessant efforts, and is each time subjected to losses which finally have the effect of unsettling his *morale.*

The care of the defense in the beginning, is to be certified of the magnitude of the assailant forces and the direction of their attack, and this with sufficient promptness to enable it to make a concentration of fire upon the important points.

Thence arises the necessity of a first line of defense, by which the main roads are held with sufficient strength

to oblige the enemy's heads of column to deploy and engage. This will be *the line of advanced-posts.*

These posts, in order to fulfil the end proposed, should, as just intimated, be established near the important communicating roads. Forces of the three principal arms of the service should here concur,—mounted men to give timely warning of the approach of the hostile columns, artillery to bring them to a stand as early as possible, and infantry to prolong the preliminary engagements. The detachments assigned to this duty should be relatively weak; and it is useless, dangerous even, to seek to support them. On the contrary, they should, as soon as the special object of the detail has been accomplished, fall back and join the forces held in rear. It is not necessary then to station them within range of the main batteries, nor near enough to the principal line to receive assistance.

It may then be concluded that the advanced-posts of a defensive position may be established at a greater distance than 4 kilometres [about 2½ miles] from the principal line; that the troops employed should consist of the three arms, their effective varying according to the importance of the post and the end to be attained; finally, that these troops should, on all occasions, fight under cover, should receive no reinforcement from the main line, and should withdraw betimes.

When the defense has reached this first result, it remains for it to wear out the forces whose advance has been discovered, and whose means of action have been appraised. The most practical method to this end will consist in compelling the assailant to a first attack, which he is led to believe may be decisive; then in involving him in sufficiently expanded engagements to insure a dispersion of his fire, in order to create the belief that very considerable forces have deployed against him, and to impress him with the necessity of calling up his reserves.

He will then bring the greatest possible number of troops to bear against the defender's points of support. These will be prepared in advance for resistance, while the intermediate parts of the line will simply be occupied, and guaranteed against surprise. This first attack can be inaugurated only by a combat of artillery.

Now the troops of the defense, firing from behind shelter upon positions which have been explored and the relative heights of whose features have been estimated, should be able to prevent the establishment of the enemy's batteries, or at least inflict serious loss, and materially weaken their efforts.

Granting that the assailant succeeds at some points in maintaining his guns, and in entering upon the attack of the sheltered positions held by the defending infantry, he should yet meet such difficulties as to frustrate his attempts to gain a footing there during the first day's action.

To achieve such a result, it is necessary that all the localities upon the approaches to the principal line of defense be organized for an energetic resistance; that the defenders have cover, and that open fields of fire be previously prepared. In these conditions it has been found that shelter trenches are sufficient to give the defenders a marked advantage.

This line may properly be called the *first line.* In many cases, perhaps, it will not be practicable to establish such a line; but whenever the *terrain* lends itself to such a use, the defense should not fail to profit therefrom.

Briefly, therefore, to compel the assailant to engage the greatest possible number of troops at the outset, it will be sufficient to concentrate a powerful artillery and infantry fire upon the principal *débouchés*, and assure shelter to the defenders. In order then to oblige a dispersion of his means of action, and to lead him to believe himself in the presence of considerable forces, it

will be necessary to extend this first line beyond the flanks of the principal position.

Finally, it is important, beginning with the initial attempts of the adversary, to disturb his flanks and rear, to keep constantly acquainted with the disposition of the hostile masses held in reserve, and to protect the flanks of the position against turning movements.

The tactical arrangement which seems to turn to best account the advantages afforded by the long-range arms of to-day, consists in stationing upon the flanks of the defensive line, sometimes at considerable distances, movable detachments, composed of elements of the three branches of the service, in which cavalry predominates. It is essential, moreover, that these bodies be boldly commanded.

A line of approaches thus organized will not fail to arrest the most vigorously led offensive army during a whole day, and oblige it to deploy its main forces. Should the assailant have no more fresh troops to call into action, his adversaries will now have a great advantage over him, and it is almost certain that his hopes will be wrecked in his efforts against the principal defensive line, even though he should have succeeded in seizing a portion of the approaches and gaining a foothold there; for on this principal line he will encounter the most powerful means of resistance within the control of the defense,—obstacles most difficult to surmount, thoroughly organized positions of shelter, the chief hostile fighting force, extremely destructive fire, and especially the reserves, which up to this time have been carefully husbanded.

Generally, it will be after this first day's combat, after this prolonged struggle in the approaches to the position, that the assailant will be brought to a stand and the defender make preparations for taking the offensive in turn. At this juncture the latter should be able to

detect the point upon which the adversary designs making his principal attack. Supposing even that several parts of the line of approaches have fallen into his hands, and that this line is broken or in his power, he has still to make his most critical effort. It is essential for him to be successful upon *the principal line of defense.*

To render his attempts decisively abortive, it will be sufficient if the artillery and infantry of the defense have good shelter at disposal, a field of fire from 300 to 400 metres broad, and numerous enough reserves to assure a superiority of fire at the necessary points. The first condition is easily fulfilled, however short may be the time allowed for preparing the defense. The second indicates the mean distance to be observed in establishing the principal line. To realize the last condition, it is essential that the position be of suitable depth to permit the reserves to be held under shelter there, and that it be traversed by sufficiently numerous roads to enable these forces to move rapidly upon the threatened points.

Here the fire at the decisive moment should be at its maximum intensity, and the facilities for delivering it, in the highest degree favorable. It is consequently necessary that the length of the defensive front be in keeping with the strength of the effectives,—an element usually calculated by allowing for the occupation of the *terrain* 5, 6, or 8 men per running metre. On this basis, an infantry division of 12,000 men should not have to defend a front exceeding 2400 metres.

From the preceding considerations it is clearly seen that after proper dispositions to insure effective fire action, and the organization of its shelter, it is by its reserves that the defense assures success. Indeed, it is only through strong supporting forces that the numerical superiority can be gained at the decisive time and place.

With the improved arms of to-day, sheltered lines can be defended by weaker forces than formerly. The formation of the reserves is thereby rendered easier, and, generally speaking, it may be said that in making the apportionment, a third of the entire effectives will not be too high a proportion. In this respect, however, circumstances can alone guide the commander.

Lastly, the defender, while actuated by the thought of attacking in turn upon detecting a favorable opportunity, should withal remember that if material superiority lies for a time with him, the moral ascendency is on the side of the adversary, and that the latter advantage outweighs the former. It is necessary, therefore, to consider the hypothesis of a defeat, and to prepare the means of executing a retreat. Here the objects to be held in view are to retard the pursuers and keep the communications open.

The first condition will be fulfilled by the employment of shelter-trenches and especially epaulements, constructed in rear of the principal line of defense, upon the points that the adversary must necessarily attempt to pass, in such wise that the artillery and the troops still intact, assigned to the duty of protecting the rearward movement, may be able to prolong the resistance there.

As to insuring the free use of the communications for the retreating forces, we shall see further on that this result is accomplished by sending off the baggage and other impedimenta about a day's march in advance.

In order to gain a correct idea of the application of these principles, let us continue the plan adopted throughout this work, of going to history for examples appearing to offer the best instruction.

In the present connection, the battle of Héricourt, or the Lisaine, fought January 15, 16, and 17, 1871, is per-

haps one of the most instructive instances that could be cited.

Here, our army for a short space held success in its hand, upon the single point where the adversary's artillery was not able to obtain the advantage; but unfortunately a false tactical combination prevented us from profiting therefrom, notwithstanding the will and energy of our leaders.

This battle presents, moreover, the exceptional circumstance that, on both sides, the commanders were able to foresee the encounter, to prepare for it, and to make in advance all the tactical dispositions which could be enlisted in favor of victory.

§ 9.—Battle of the Lisaine, January 15, 16, and 17, 1871.

I.—Situation of the Two Armies.

1st.—Composition of the Forces.

In order to render a clear account of the events leading up to the battle of the Lisaine, we are forced to go back to the combat of Villersexel, which took place on January 9.

On this date, the forces confronting each other were as follow:—

French Army.

COMMANDER-IN-CHIEF, GENERAL BOURBAKI.

15th Corps, General Martineau des Chenez.

About 35,000 men, 31 squadrons, ... 144 guns.

18th Corps, General Billot.

About 30,000 men, 16 squadrons, ... 96 guns.

20th Corps, General Clinchant.

About 25,000 men, ... 54 guns.

24th Corps, General Bressolles.

About 25,000 men, 6 squadrons, ... 54 guns.

Crémer Division.

About 15,000 men, a cavalry detachment, ... 32 guns.

Reserve, General Pallu de la Barrière.

About 10,000 men, 8 squadrons, ... 18 guns.

Total, about } 140,000 men, 61 squadrons, ... 398 guns.

German Army.

COMMANDER-IN-CHIEF, GENERAL VON WERDER.

Baden Division, General Von Glümer.

About 21,000 men, 12 squadrons, 54 guns.

Combined Infantry Brigade, General Von der Goltz.*

About 7,200 men, 8 squadrons, 18 guns.

4th Reserve Division, General Von Schmeling.

About 17,300 men, 8 squadrons, 36 guns. (Landwehr troops.)

Total, about } 45,500 men, 28 squadrons, 108 guns.

2ND.—MOVEMENTS OF THE TWO ARMIES.

At Villersexel, General Bourbaki had attacked and beaten the enemy, who was obliged to evacuate this locality and retire northward under cover of night.

General Clinchant particularly distinguished himself in this action, the result of which stimulated the courage of our improvised troops.

On the day following the battle, January 10, each of the two armies stood in expectation of an attack from the other; but during the forenoon Von Werder, seeing that we failed to renew our offensive, decided to shift his forces to a defensive position on the Lisaine, which had already been studied and prepared.

* Formed of regiments only temporarily linked together.—TR.

His retreat was executed by way of Moffans, Béverne, and the road from Ronchamp to Belfort, without pursuit on our part.

Inaction of the French Army.—General Bourbaki had at this stage to overcome the greatest difficulties in revictualing his army; and fearing to cut loose from the Besançon-Montbéliard railroad, which constituted his base of supplies, he was forced, for the purpose of renewing his provisions, to allow the 10th, 11th, 12th, and 13th of January to slip by.

His first dispatch of January 10 to the Minister of War,* indicates, moreover, that instead of pursuing the enemy, he was obliged to march upon Arcey, a point lying on the road between Villersexel and Montbéliard, which the Germans held as an outpost and whence they were able to disturb our forces.

His dispatch of the 11th forcibly sets forth the embarrassments by which he was beset at this time.

Here are its most striking passages:—

"The chief intendant of the 24th Corps has informed General Bressoles that he will not be in condition to assure the issue of supplies if the troops move to-morrow; the same is true with regard to the 15th Corps. To-day I caused the greater part of my forces to incline to the right, for the purpose of preparing for the attack to be made the day after to-morrow, in which," etc. * *

"The possession of Arcey by our forces is necessary in order to permit a continuance of the advance. * *

"The 15th Corps has joined me only in part; I have notified General Martineau to get in hand, with the greatest possible speed, the elements still wanting; the obstruction of the railroads," etc. * * *

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* Parliamentary Inquiry into the Acts of the Government of National Defense; vol. iii., page 414.

The Minister of War replied to this dispatch by the following telegram:—

JANUARY 12, 1871.

"The seizure of Arcey which you have planned for to-morrow will not, it seems to me, add much toward intercepting the enemy's communications, in the line with what you have already accomplished by the capture of Villersexel. Is the result to be expected from this operation proportionate to the value of the time necessary for it? You appear to abandon, at least for the present, the march upon Lure. Do you not fear that by inclining your united forces to the right, you will permit the two hostile groups at Belfort and Vesoul to form a junction by the Lure route?

"I am afraid that you will lose the benefit of the separation of the enemy into two fractions, which you have so well effected. Your successive movements have been made with great slowness, three days having already elapsed between Villersexel and Arcey, points from 5 to 5½ miles apart.

"I do not deny that there are difficulties; but it is my duty to warn you that according to the reports received here, reinforcements are reaching the enemy from various sides, and that in thus postponing decisive action, even from the best of motives, you permit the adversary to array a strong force against you."

Nevertheless the general-in-chief adhered to the belief that his army could not be put in condition to move forward before the 13th. In the interval he contented himself with establishing his different forces in defensive positions, to be in readiness for a fresh engagement.

Meanwhile Werder gained the Lisaine and organized the ground taken up there with such activity and energy as to render it almost inaccessible from the front.

3RD.—THE LISAINE POSITION.

This position is formed by the heights on the left bank of the river between Frahier and Montbéliard, with a length of about 12 miles. Its extent was then too great for the forces at Werder's disposal. These, however, occupied more especially the space between Héricourt and Montbéliard, or a front of about 4½ miles.

The principal heights in the locality are situated on this side of the Lisaine: 1st, that of Chalonvillars, which commands the region around Chenebier and Frahier, and is terminated near the river by inaccessible slopes; 2nd, that of rocky-crested Vaudois, dominating Héricourt and vicinity; 3rd, those of Les Grands-Bois and La Grange-Dame Farm, from which can be surveyed the entire valley around Montbéliard. These eminences vary in altitude from 350 to 500 metres.

Upon the front, the Lisaine downward from Chenebier forms a serious obstacle. Its width is from 6 to 8 metres, and its depth from ½ to 1 metre. But at this period it was frozen, and it was necessary to break the ice opposite the presumed points of attack in order that the stream might preserve its defensive value.

Eight villages and two small cities cover the different points of passage.

Three high-roads lead from the west to Belfort *viâ* Montbéliard, Héricourt, and Frahier.

The country, wooded and generally difficult, offered few localities favorable for the deployment of artillery, and permitted a force coming from the west to approach the field under cover.

The position could be turned to the north by the road from Lure to Ronchamp, and to the south by the valley of the Savoureuse. Its extent and the absence of lateral communications for the movement of reserves were however the principal defects.

On the whole, then, this was a good defensive site. The portion between Montbéliard and the Vaudois, especially, could be given great resistant strength by skillfully organizing it and supplying it with powerful artillery.

4TH.—ORGANIZATION OF THE DEFENSE.

By Werder's order, General Treskow I., commanding the siege corps at Belfort, had caused this position to be reconnoitred and prepared for defense immediately after the combat of Villersexel. (*See Plate XXII.*)

To this end, he had constructed batteries armed with siege guns at the following points:—

Upon Mt. Vaudois	7 guns,	12-cm.
Upon the height of La Grange-Dame	5 "	15-cm.
At the chateau of Montbéliard	4 "	9-cm.
Idem	2 "	12-cm.
At Vieux-Charmont	2 "	9-cm.
At Allanjoie*	2 "	9-cm.
At Bourogne	4 "	15-cm.
At Granvillars, Joncherey, and Delle	8 "	12-cm. and 15-cm.

In addition to these works, shelter-trenches and battery epaulements were, with the aid of Werder's troops, constructed at all important points, namely:—

Frahier, northern issue: 4 shelter-trenches, 1 battery.

Echevaunes: shelter-trenches on the south side to command the road to Chenebier.

Chenebier: organization of the west and south fronts, shelter-trenches upon all the roads.

Chagey: defensive organization, in the west and south, of both portions of the village separated by the Lisaine; shelter-trenches echeloned in three lines along the roads upon the heights to the east, which might perhaps be called into use as a means of retreat.

* See map of France to scale $\frac{1}{80,000}$, section Montbéliard.

Luze: defensive organization in the west upon the left bank; a battery to the east upon the road to Echenans.

Chevrot Mill, to the south of Couthenans, a battery.

Mt. Vaudois, western slope: 4 battery epaulements and an almost uninterrupted line of shelter-trenches. Southern slope: shelter-trenches in two lines, and a grand battery of 12 guns in rear,—these works facing westward.

Héricourt: defensive organization of the western and southern fronts; shelter-trenches upon all roads leading from the place.

Mt. Salamou: two batteries; shelter-trenches before the wood of Chanois; a battery on the extreme southern point.

Mt. Dannin: double line of shelter-trenches echeloned opposite the eastern border of the wood of Chanois.

Bussurel: the village abandoned; double line of shelter-trenches in front of the place.

Bethoncourt (*upon the left bank*): defensively organized.

Petit-Bethoncourt (*upon the right bank*): defensively organized.

Road from Bethoncourt to Grand-Charmont, northeast of Montbéliard, along *the southern border* of the wood of La Fougère: defended by a line of shelter-trenches, forming with Bethoncourt, Grand-Charmont, and Vieux-Charmont, a defensive position of the second line, in rear of Montbéliard.

Grand-Charmont and Petit-Charmont: defensively organized on the western and southern fronts.

La Grange-Dame: 4 epaulement batteries commanding the *débouchés* to the northwest; a fifth battery northeastward of Montbéliard, having a view down the valley of the Allaine.

Montbéliard: abandonment of the place proper. Defensive organization of the castle, which overlooked the approaches to it; a battery to the east, facing south.

Sochaux: defensive organization of the south front.

Lastly, upon all roads leading from the Lisaine to Belfort, shelter-trenches were arranged in a manner to protect the retreat, if such became necessary.

In addition to these works, the line of the Allaine was defensively organized upon the right bank as far as Delle, and upon the left bank from Exincourt to Croix.* The number of villages around Belfort in which the siege and occupation forces had formed defensive works reached forty-eight.

In order to cover the approaches to the ground on which the army was to stand for battle, outposts composed of the three arms were established at Arcey, Chavanne, and neighboring localities, at from 4 to 4½ miles in front of the position, with instructions to oppose a most energetic resistance, for the purpose of forcing us to a deployment.

The roads to the north of the position had been cut, and the bridges of the Lisaine destroyed or put in readiness to be destroyed.

Signal stations had been established in all directions. A telegraph line running from headquarters to the wings, put Werder in direct communication with the siege forces, with Versailles, and with General Manteuffel. The latter had already begun his march toward the south.

Distribution of the Troops of the Defense.—At the commencement of his retreat, on the 10th, Werder had formed a special detachment, 8 companies (2 battalions), 13 squadrons, and 2 batteries strong, which was placed under orders of Colonel Willisen.

Its primary duty was to take stand near Lure and observe our march as well as the country in the direction

*See map of France to scale $\frac{1}{320.000}$.

of Epinal, during the retreat of the XIV. Corps. Besides this, it was to keep in touch with our forces, and cover the right flank of the position. In case of an attack by superior forces, it was to fall back upon Giromagny.

The 4th Reserve Division (Von Schmeling), then in full strength, was intrusted with the defense of the ground from Héricourt to Montbéliard. It held a brigade and 12 guns at the latter place and Sochaux; and a brigade and 24 guns at Héricourt. This division counted 15 battalions.

The Combined Infantry Brigade (General Von der Goltz) was to defend the portion of the line comprised between Héricourt and Chagey, with 6 battalions and 18 guns.

Finally, of the Baden Division, 3 brigades (17 battalions) strong, 2 brigades stood at the outset toward Chenebier and Chagey, and the third in reserve at Chalonvillars and Mandrevillars, 4 batteries being left with it.

The regimental equipage had been moved from the right wing toward the centre, and the trains along the Mulhouse road to a point a little over 3 miles east of Massevaux. The latter were thus placed, according to rule, upon the principal line of retreat, at a distance of a short march.

These dispositions were modified on the 13th, after the combat at Arcey. The movement of the Army of the East from this quarter, led Werder to suppose that the principal thrust would be made upon Montbéliard and Héricourt. He therefore called up a second brigade and the Baden Cavalry Division to Brévilliers and Chatenois, leaving thus at Chenebier only a detachment of two battalions, a squadron, and a battery, which were to serve as support to the right flank.

Finally, the headquarters were established at Brévil-

liers. These dispositions made, Werder awaited our attack.

II.—Prelude to the Battle.

Combat of Arcey.—On January 13, General Bourbaki, being no longer hampered in his movements, put his army in march and began a wheel to the right, which was to carry him toward the east.

The German outposts had orders to resist this advance, but without compromising their line of retreat.

Our 24th Corps at once attacked the forces met at Arcey, situated about 4⅓ miles in front of the main position. There stood at this point, Ste.-Marie, and Gonvillars, a regiment, a squadron, and two batteries, forming the advanced-guard of the 4th Reserve Division.

After an inconsiderable engagement, the Germans were thrown back toward the East, along the road leading to Héricourt. They made another stand at Aibre upon the Rupt; but being turned by way of Ragnaux, they retired to and occupied Tavey, almost at the very entrance to Héricourt.

At 4 P. M. General Bressoles' forces came to a halt upon the Rupt.

Combat of Chavannes.—On the same day, the 20th Corps (Clinchant) encountered near Chavannes, upon the right bank of Saulnot Creek, an advanced-guard of the Prussian Combined Brigade, counting a strength of two battalions, a squadron, and a battery. After a brief artillery duel, this force fell back fighting, and took up a second position near Champey.

Our troops continuing their offensive, compelled it to retire upon Couthenans. The movement of the 20th Corps was brought to an end in the afternoon.

Action of the 14th.—On this day, the 15th Corps threw back toward Montbéliard a hostile detachment on outpost duty at Dung.

Upon our left, the propinquity of the Crémer Division and the march of the 18th Corps, obliged Colonel Willisen to withdraw his cavalry from Lure upon Ronchamp, and direct his infantry with a battery upon Frahier.

The patrols of the opposing armies, on this day, came into contact all along the line. Three of our corps, the 15th, 24th, and 20th, were concentrated upon the line Dung, Aibre, Le Vernois, occupying a narrow front at a distance of about 5 miles from the adversary's main forces.

General Bourbaki was anxious to attack on the 14th. Convinced that Werder's army occupied only the space comprised between Montbéliard and Héricourt, he purposed commencing the offensive movement by engaging the 15th Corps on the right, while the 18th Corps and the Crémer Division, forming together a mass of more than 40,000 men, were to outflank the enemy's right and turn his positions.

For this it was necessary that the outward wing should reach the hostile line simultaneously with the rest of the forces. But unexpected difficulties had delayed the movement of this wing. The hardships resulting from an excessively low temperature, the impracticable condition of the roads, the youthfulness of the troops, the dispositions to be made each day in order to be prepared to repulse offensive thrusts of the enemy, which were looked upon as probable,—all these things conspired to retard the progress of the 18th Corps, so that by the 14th, it had not proceeded beyond Lomont and Moffans. On this day Crémer reached Lure, and was placed under the orders of General Billot.

Notwithstanding the delays that had attended the forward movement, General Bourbaki, counting upon the arrival of the two forces of the left, gave instructions on the evening of the 14th, for an attack the next day. These may be epitomized thus:—

"Call to arms at 6:30.

"The 15th Corps will occupy the Bois de Bourgeois and Mt.-Chevis Farm, and will assail Montbéliard.

"The 24th Corps will take possession of the Montevillars, Grand, Tavey, and Chanois woods, as well as of the points of passage of the Lisaine.

"The 20th Corps will march upon Héricourt by Tavey, but is not to seize the place until the 18th Corps has developed its movement on the left.

"The 18th Corps will occupy Couthenans, Luze, and Chagey, and will commence its manœuvre to the left when the cannon of the 15th Corps are heard.

"The Crémer Division will reach the Lisaine at 6 A. M., and execute a turning movement against the enemy's right, crossing the Lisaine, if it is possible to do so, a mile and a quarter above Chagey. It will then proceed to Mandrevillars and Echenans, while observing the roads to the north and upon the left.

"The Reserve will move to Aibre and Tremoins, after the 24th Corps has gone forward.

"The garrison of Besançon will direct 4 battalions upon Exincourt and Sochaux.

"The movement will be commenced by the 15th Corps."

The objectives, in case of success, were: Argiésans for the Crémer Division, Héricourt for the 20th Corps, Montbéliard for the 15th.

These orders were supplemented by a telegram addressed directly to General Crémer, at 2 P. M. on the 14th, which unfortunately was not received until night.

The movement projected by General Bourbaki consisted then in a wheel to the right, the 15th Corps serving as pivot, the marching flank being intrusted with the duty of extending beyond the enemy and turning his right.

This was a manœuvre similar to that executed by the

German army on August 18, 1870. But in the present case, the nature of the ground, the state of the weather, the condition of the roads, and the character of the troops, were so many difficulties in the way, and prevented the plan from being carried out in the manner possible under ordinary circumstances.

Moreover, in order to reach the position upon the Lisaine and come up abreast of the right forces at the moment chosen for the attack, the marching wing was under the necessity of setting out in advance, as was the case on August 18 upon the plateaus of the Moselle.

Hence the movements, although well combined in view of the end proposed, were to be seriously trammeled by the details of execution.

III.—First Day.

January 15, 1871.—On the morning of this day the Germans held the following combat positions:—

Extreme Right.

Willisen's Special Detachment.—At Ronchamp and Champagney: 3 cavalry regiments, 2 rifle companies, 1 battery.

At Frahier: a battalion and a battery.

General Degenfeld.—At Chenebier: 2 battalions, a squadron, and a battery; the rest of the brigade in rear.

Right.

General Von der Goltz.—At Chagey, Luze, and at the foot of Mt. Vaudois: 2 regiments, 1 squadron, and 2 batteries.

Centre.

The Knappe Brigade occupied, with 7 battalions, 2 squadrons, and 4 batteries, Mt. Vaudois, St.-Valbert, Héricourt, the Salamou, and the western skirts of the wood of Mt. Dannin.

Left.

Eight battalions, 2 squadrons, and 2 batteries held the ground in front of Bussurel, Bethoncourt, and the approaches to Montbéliard, with outposts at Mt. Chevis and Ste.-Suzanne.

Extreme Left.

Between Exincourt and Croix stood 8 battalions, 2 squadrons, and 3 batteries; and at Grand-Charmont, 6 battalions, 1 squadron, and 6 batteries.

Combat of Montbeliard.—At daybreak on the 15th, a first attempt by the 15th Corps on Mt. Chevis Farm came to naught. But the effort being renewed at 2 P. M., was crowned with success, and this force attacked Montbéliard, which the Germans were obliged to evacuate. They left at the castle 2 companies, with 6 siege pieces. The remainder of their infantry was moved to the heights in rear, taking post either under cover of the woods or as supports to the batteries.

An artillery combat was then kindled between twenty-four field-pieces and five 15-cm. guns, all protected by epaulements, and nine French batteries. This action however did not lead to any important result. In the evening our troops occupied the town of Montbéliard, but did not succeed in cutting the communications of the defenders of the castle.

At Bussurel, the 24th Corps had vainly endeavored to force the lines of the defense; but on account of the inefficiency of our artillery, the infantry was not able to act effectively.

The same fate attended the attempt upon Petit-Bethoncourt.

Combat of Hericourt.—Around Héricourt, the German preparations for defense were of a very substantial kind.

Between Luze and the Salamou, 68 guns had been brought into position, 7 of them siege pieces.

The approach of our troops compelled the hostile outposts to evacuate Champey and Tavey. But the 20th Corps was to delay its action until the movement of the 18th was well under way upon its left. Meanwhile it contented itself with occupying the heights to the west and keeping up a contest of guns.

Movements on the Left.—Unforeseen difficulties arose to retard the march of the 18th Corps and the Crémer Division. The former force, contrary to the expectation of General Bourbaki, had not been able to reach Béverne on the 14th, and consequently the order prescribing its subsequent movements was not received until toward midnight of this date. As to the Crémer Division, which had arrived at Lure on the same day, it was not advised of the dispositions to be made by it until between 2 and 3 o'clock of the following morning.

The commander of the 18th Corps thought it his duty to report to the general-in-chief on the impossibility of the Crémer Division being on the Lisaine at 6 A. M., and the delay that this circumstance would entail upon his own movements.

Still another difficulty came to view.

Thebodies on the left feared to penetrate to the north of the Lure-Béverne-Héricourt road, on account of the presence of hostile troops. It was in consequence decided to assign a portion of this road to both the Crémer Division and the 2d Division (Penhoat) of the 18th Corps. As a result, a collision occurred between these forces at Lioffans, and another afterwards at Béverne.

In a short time request was made for the Corps Artillery and that of the 2d Division to lead the advance. This change in the position of the batteries occasioned fresh loss of time. It was only toward 2 P. M. that the

heads of column of the 18th Corps reached the scene of action. They still had time to occupy Couthenans, and to enter upon an artillery engagement. But the ground to the south and west of the wood of La Boulaye was not favorable for the deployment of this arm. Five batteries had scarcely opened fire to the west of Luze when they were rained upon by the enemy's projectiles. Soon, out of this artillery, there were only two guns per battery fit for action.

The cannonading was not resumed until toward 4 o'clock; from which time till evening it was kept up in rather a tepid way. It appeared impossible to attempt a direct attack upon Luze, which was under the protection of the position guns at Mt. Vaudois.

The 3d Division of the 15th Corps (Bonnet), however, upon arriving on the scene, made a vigorous attack upon Chagey. The first attempt to seize this village failed. A second was on the point of succeeding when the receipt of reinforcements by the enemy turned the scale against us.

In front of Chenebier, the Crémer Division was not able to debouch until nightfall. It was obliged to content itself with exchanging a few cannon shots with the Baden troops of General Degenfeld.

In brief, the first day's action ended, if not by a repulse to our arms, at least in failure to secure any important results. This was due primarily to the delays experienced by the forces on the left,—delays which have been in part explained, and to a consideration of which it will be proper to return later.

IV.—Second Day.

January 16, 1871.—From the summit of Mt. Vaudois, where he had held himself during the 15th, Werder had followed all our movements.

It was afterwards conjectured that, discovering in the afternoon the manœuvre which threatened his right flank, he made new defensive dispositions during the night, and accumulated on this side the numerous reinforcements which it was supposed had come up.

This was an error.

The enemy had received no such support, and in the evening the German commander, observing that we had not begun the principal attack, ordered all his generals to hold fast to their positions. He simply recommended that during the rigorous night approaching, the troops, excepting those on outpost duty, should be housed in the villages in the vicinity. Upon the front, patrols were to harass our lines and send in frequent reports of the situation.

The scant results attending our first attacks gave the enemy valid grounds for hopefulness.

On our side, the behavior of our young troops under the violent fire to which they had been subjected, had not failed to inspire General Bourbaki with a certain degree of confidence. The delay that had attended the operations of our left might still be retrieved, and with a view to prevent misunderstandings, his chief-of-staff, Colonel Leperche, visited the commander of the 18th Corps to make known his intentions respecting the movements of the next day.

The necessity of executing a turning manœuvre by the forces on the left, composed of the 18th Corps and the Crémer Division, was clearly recognized. General Billot had under his orders a mass of over 40,000 men, supported by more than 100 field guns. But as the character of the ground would not permit a deployment of all his forces in front of Luze and Chagey, he decided to dispatch the 2d Division (Penhoat) upon Etobon, there to concur in the movement which General Crémer was the next day to direct against Chenebier.

To avoid betraying their presence to the enemy, our forces, during the night of the 15th, were forbidden to light fires. The unfortunate soldiers were thus compelled to hold themselves in bivouac with the thermometer standing at from 8 to 12 degrees below zero.

Attack of the Chateau of Montbeliard.—On the morning of the 16th the troops of the 15th Corps began an attack upon the chateau of Montbéliard. But after a short time their efforts broke down under the fire of the German artillery. This was so effective that toward 10 o'clock our batteries were forced to draw off, leaving two disabled guns behind.

Up to 3 P. M. a vigorous fusillade was maintained in the town itself and a violent battery fire without; but these were unattended by consequences of any importance.

The artillery duel at this point was continued until night, save for a brief space in which we interrupted the action, without giving rise to any circumstance worthy of special mention.

Combat of Bethoncourt.—In front of Bethoncourt the left of the 15th Corps cannonaded the enemy's positions until 3 P. M.

Believing then that the offensive was sufficiently prepared, our troops moved forward upon Petit-Bethoncourt; but the tactical cohesion of the adversary was far from being broken, and they were compelled to retire.

A second attempt upon the north side of the village fared no better. Finally a third, executed after 4 o'clock by still larger forces, was brought to naught by the fire of the German batteries.

Combat of Bussurel.—At Bussurel the 24th Corps was content to make a simple demonstration. The contest of guns here did not result to the advantage of our batteries.

Combat of Hericourt.—The valley and heights around Héricourt were enveloped in a thick fog until mid-day; nevertheless the 20th Corps had since morning been directing a violent artillery fire upon this place. Meanwhile four successive attacks were executed by infantry against the town and approaches. The first, made by the 1st Division against St.-Valbert, was repulsed. The second, carried out by the 2nd Division toward 9:30 A. M. against Le Mougnot, to the west of Héricourt, was no more fortunate. It was in vain renewed an hour afterward. Finally, in the fourth assault, upon the southern outlet from Héricourt, toward 11 o'clock, our troops gained a footing in the most advanced houses on the left bank. But unable to maintain themselves here, they were obliged to renounce their enterprise.

A lull in the contest then ensued, and after 2 P. M. the action was kept up simply by the artillery, whose efforts however were fruitless.

In front of Luze and Chagey we engaged with skirmishers only, until the afternoon, when our artillery came into line. This, however, was followed by no serious attack. Our forces of the 18th Corps had observed the arrival of hostile reinforcements at Chagey, and the leaders concluded, in consequence, that an offensive movement against this point would be still more impracticable than on the day before. In reality, there were at Chagey on the 16th, only four battalions, one of which stood at the southwest corner of the wood of La Brisée.

First Combat of Chenebier.—The most serious struggle of the three days' action took place on the 16th, on our left.

The enemy held at Chenebier only 2 battalions of Baden troops, a squadron, and 2 batteries.

After a prolonged cannonading, General Crémer at 2 P. M. moved his division toward the village. One attack was made against the western front and another upon the Courchamp suburb, to the south; while a third column, turning the village, was moved by the valley of the Lisaine against Colin Mill, situated at the *débouché* of the road leading from Chenebier to Chalonvillars.

The detachment at Frahier was forthwith dispatched to the assistance of the defenders of Chenebier; but the latter, outflanked, were forced to fall back in disorder, first upon Echevannes, and thence to Frahier. From the latter place they made their way to Rougeot Mill, upon the road from Frahier to Belfort, where two additional battalions were, towards 7 o'clock, sent to rally them, and put them in condition to resist a fresh attack.

This retreat was executed as night was coming on, sometime about 5:30 o'clock.

According to the German official account, "from this moment the direct road to Chalonvillars was barred to the Baden troops."*

But neither General Crémer nor Admiral Penhoat felt it a duty to undertake the pursuit, and thus endeavor to complete their success.

"Once at Chenebier," General Crémer has since stated, "as my troops were very much fatigued, the Penhoat Division received orders to seize the ground in advance of the village.

"For myself, I fell back to complete the reformation of my lines in the positions I had just left, with a view to then moving forward."†

Upon receiving word of the capture of Chenebier, Colonel Willisen withdrew his detachment to Giromagny, thus evacuating the village of Frahier.

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*The Franco-German War; 18th section, page 1051.

†Parliamentary Inquiry; vol. iii., page 536.

The enemy had then been beaten back from that portion of his lines northward of Chagey, and the road to Belfort was open.

The situation was so much the more serious for the Germans as "the position at Rougeot Mill being easily turned from the south, was little suited for defense, and as Degenfeld's troops were exhausted."*

V.—Third Day.

January 17, 1871.—"The news of the loss of Chenebier and of the evacuation of Frahier reached Werder in the evening. It was of a nature to provoke serious reflection. If the French continued to follow to the latter place, they would be but 5 miles from Belfort.

"It was very probable that this first success would lead them to give up their partial attacks along the whole front of the line of battle, and throw themselves with their entire strength upon the German right wing."†

In consequence, General Werder resolved, on the evening of the 16th, to repair matters in this wing.

At 8 P. M. he ordered General Keller to leave his artillery in rear, and straightway set out for Mandrevillars with the troops at his disposal, so as to be in readiness to attempt the recapture of Frahier and Chenebier.

This order was received by Keller at 8:30 P. M. Requesting his colleague, General Von der Goltz, to send one or two battalions at daybreak from Chagey to Chenebier, he put his own command in march at 11 o'clock, after having been reinforced by two battalions withdrawn from Bussurel.

He arrived at Rougeot Mill at midnight, rallied the

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* The Franco-German War; 18th Section, p. 1053.

† *Ibid.*

troops of General Degenfeld, and gained Frahier before dawn.

Finding this village unoccupied by the enemy, he took possession of it with the 8 battalions, 2 squadrons, and 24 guns at his disposal.

During the night, three additional guns (15-cm.) had moreover been sent to Rougeot Mill to support this counter-offensive.

Second Combat of Chenebier.—At 4:30 A. M. these troops moved upon Chenebier by Les Evaux Wood, which is contiguous to the northern front of the village, and by the valley of the Lisaine.

The attack being made at night and in severe weather, the enemy hoped to come upon our recruits unawares; but the latter were on their guard and made an energetic resistance. Soon the entire Penhoat Division was under arms.

While we were holding the assailing force on the north at bay, a second column, turning the village, suddenly debouched from the south upon the houses of Courchamp. In this quarter our soldiers were for an instant surprised; but quickly recovering, they prevented the enemy from making further progress.

The contest was vigorously kept up during the first hours of the morning without revealing to General Keller any symptoms of success in his efforts to seize the houses situated on the side toward Echevannes or to gain ground in Courchamp.

General Billot, arriving early upon the battle-field, took charge of the defense.

The Crémier Division had been called to arms, and stood at Etobon ready to lend support to Admiral Penhoat.

Despite the 24 guns at its disposal, the enemy's artillery was unable to gain any advantage. At one time

even; a German battery was forced to withraw on account of the flank fire brought to bear upon it by a section of artillery which the Admiral himself had directed into position. The efforts of the enemy began to wane. Toward 8:30 A. M. he abandoned the village, and at 11, after fresh but unavailing attempts, and upon witnessing the establishment of new batteries toward Etobon and northward of Chenebier, retreated in the direction of Echevannes and Frahier.

The assault had failed of success. Notwithstanding their inexperience, our young soldiers, under a vigorous impulsion, had cast back Werder's well-trained troops.

The numerical disproportion between the opposing forces was less than our adversaries have affirmed; for at this juncture the most favored battalions of the Army of the East, though they contained 1000 men at the outset, had fallen off to about 300. Moreover, the Penhoat Division had only 12 battalions, and the Germans had engaged 10½, counting the 2 battalions and 2 companies sent forward by General Von der Goltz.

The energy displayed in the resistance has been testified to in the German official account, in the following terms:—

"At 9 o'clock, upon the arrival of the 1st Battalion of the 3d Baden Regiment as a reinforcement for the right wing, there ensued a fresh general attack, the conduct of which devolved upon General Degenfeld.

"The troops with great resolution once more forced their way into the Bois des Evaux, and after a sanguinary contest of two hours duration, were complete masters of it. But all their efforts to gain possession of the barricaded and stoutly defended village of Chenebier, proved ineffectual. Lieutenants W. . and S. . , leading forward men belonging to Baden and Prussian companies, succeeded, indeed, in seizing two houses in the place, but were unable to hold them.

"A small storming party, led by Major M., and composed of 2 companies of the Eupen battalion, with 2 platoons of Baden troops at their head, advanced toward the entrance to the village, but was compelled to give way under the defenders' fire. It contented itself with the occupation of the body of the wood. The edge on the side toward Chenebier had to be abandoned in order to afford the men some degree of shelter against the heavy fire of the enemy."

Our success was then clearly affirmed, and at 11 o'clock, the adversary, falling back unpursued upon Frahier, confined himself to covering his retreat by means of his artillery.

Again the road to Belfort was open.

Unfortunately we made no effort to complete this victory by vigorously taking the offensive and following up the enemy. The Germans subsequently attributed the absence of an attempt at pursuit on our part to the effects produced by their batteries.

In their official account our inaction after Chenebier is thus explained:—

"The Penhoat and Crémer Divisions considered that their task was rather to secure their own left wing, which appeared to them threatened, than to continue the offensive. Hence the stubborn defense of Chenebier and the failure to venture upon any further enterprise."

Engagements at Chagey, Luze, and Héricourt.—Upon the other parts of the field, our forces made ineffectual attempts to prepare for the attacks of the infantry by the fire of their batteries.

Everywhere the artillery of the defense had too pronounced an ascendency.

At 2:30 P. M. of this day, the 17th, the offensive movement of the Army of the East was brought to a stand-still.

On the extreme left the Willisen detachment, after ascertaining that there was no fear of a further advance on our part, re-occupied Ronchamp, again outflanking our left with its cavalry.

Toward noon General Bourbaki, who had in vain looked for results from the turning movement by his left and for symptoms of a sortie by the garrison of Belfort, rode over the field of battle to acquaint himself with the condition of affairs and consult with his corps commanders.

The latter unanimously declared that their soldiers, cruelly tried by a succession of marches and combats, by the severely cold weather, and by the privations to which they had been subjected, were exhausted, and out of condition to continue the action.

At 3 P. M. there was another conference with the principal generals. The proposition to mass considerable troops on the left wing and give emphasis to the turning movement, was discussed; but the fear of an attack by Werder upon the army's communications in the direction of Montbéliard, led to a quick abandonment of the idea.

The troops, indeed, had reached the limit of their strength, and intelligence of the near approach of General Manteuffel had already weighed upon the decisions of the commander.

Retreat was then resolved upon.

The want of provisions, which had before fettered the movements of the army, was soon to convert this retreat into an irreparable disaster.

The German general-staff, in correct appreciation of the terrible situation in which we were placed by this new decision, has affirmed that "the Army of the East found itself under the necessity of conquering upon the Lisaine or of being prepared for the worst."

VI.—Comments.

1ST.—LOSSES.

On our side about 8,000 men were rendered *hors de combat.* This gives a proportionate loss of 5.7 per cent., which for young troops testifies a vigorous effort, and shows that the contest had been for them a most honorable one.

The German casualties amounted only to 60 officers and 1,586 men, that is, to 3.5 per cent. of the effective.

These figures strikingly demonstrate the advantages which proper tactical instruction and a solid defensive organization assure to troops.

2ND.—CAUSES OF THE SUCCESS OF THE DEFENSIVE.

a.) *Weakness of the Assailant Army.*

Insufficiency in matters of supply and transport, the feeble manner in which reconnoitring duty was conducted, the erroneous interpretation of information in many cases, and, lastly, the mistakes committed by us in preparing for this campaign, were sufficient to assure the success of the Germans.

The Army of the East, which counted a strength of about 140,000 men, should, before the commencement of operations, have had at least two months' provisions, or about nine million rations, collected upon the base Dijon-Auxonne- Besançon.

Now when this weakened and decimated army returned to Besançon, its supplies were not sufficient for seven days; and had it wished to make use of the means of subsistence here, it would have brought this town to the verge of starvation in twenty days, and coupled the fate of the place with its own in a surrender to the enemy.

The transports were inadequate. Requisition should have been made in advance for wagons, teams, and

drivers, sufficient to provide for continual movements to and fro between the army and the various railroad stations of the Dôle-Besançon-Montbèliard line to which the provisions were to be sent.

This rail line, at the critical period we are considering, should have suspended all traffic save that relating to the needs of the army, and its entire management should have passed under military control.

Temporary platforms for unloading should have been constructed at the stations where such conveniences were lacking.

Measures of this character were, in the actual case, neglected.

The excessive cold, and the ice, which covered the roads, presented obstacles to the movement of guns, mounted troops, and convoys. The cavalrymen were constantly on foot leading their horses.

During the same period, service on the German side pertaining to convoys, transports, and cavalry, was performed as in ordinary times. This arose from a circumstance of practical detail, the custom of rough-shoeing that prevails in northern countries.

It remains to give an account of the causes which led to the erroneous estimate of the information brought in respecting the enemy. The fact of this misinterpretation was involuntarily admitted later by General Crémer in the following statement:—

"At Lure, I received an express order to march upon the villages of Etobon and Chenebier, * * * at Etobon, I was directed to proceed to Chenebier and take post upon the plateaus. I could not very well understand why this movement was prescribed, because our left flank was turned in consequence of it."*

The German troops by which General Crémer be-

* Parliamentary Inquiry, vol. iii., page 536.

lieved himself turned, were no other than those of the weak detachment under Willisen, told off on observation duty, with instructions to fall back before an emphasized attack.

Counting from the 15th, Crémer had in reality upon his left only cavalry and a battery.

It is then not at all doubtful that by taking the contact with vigor, the Crémer Division would have quickly disembarrassed itself of the hostile force on this side. It would at least have made certain that a group composed of 8 companies, 13 squadrons, and a battery could not paralyze its advance.

Further on in the statement referred to, General Crémer adds that after taking possession of Chenebier, on the 16th, he sent a communication to the commander of the 18th Corps to warn him of the danger to which his left flank was exposed.

This view of the state of affairs at this extremity of the line was the origin of the inaction that prevailed here on the 16th and 17th of January, and was one of the principal causes of the final success of the defense.

b.) *Superiority of the German Army.*

The advantages which the enemy drew from the precision of his fire, the range and calibre of his artillery, and the use of the epaulements which he had constructed, were considerable enough to throw victory into his hands.

These advantages were rendered more pronounced by the difficulties which our batteries encountered in deploying, the inexperience of our artillerymen, the character of the soil, and even the inferior quality of our gun-carriages. From this situation of affairs resulted the feebleness of our artillery service, which was powerless to prepare for our attacks. The failure of our offensive was the final consequence.

c.) *Organization of the Defense, Considered with Reference to the Ground Selected and the Distribution of the Troops.*

The position on the Lisaine was too extended for the effectives at General Werder's disposal. As a consequence both his flanks, although guarded, were weak, and exposed to the dangers of being turned.

However, the distribution of the German forces accorded with the inexperience of our troops, and their general condition in point of *morale.* It led the latter to suspect the presence of reinforcements of considerable size, and a new hostile army numbering from 80,000 to 100,000 men, at a time when it was generally known that after the reduction in our ranks by fatigue, privations, and the rigors of the season, we were unable to bring into line more than 90,000 men.

d.) *Influence of the Flank Detachment.*

The utility of employing the Willisen detachment for the protection of the right of the position has already been sufficiently demonstrated. It certainly prevented our pursuit after the taking of Chenebier, paralyzed General Crémer's initiative, and fettered the turning movement ordered by General Bourbaki at the very moment when the end in view seemed about to be attained.

It is proper to add to these causes the strength of the Lisaine position, and the energy displayed by the leaders of the German army.

This energy was strongly buttressed by the stubbornness of General Von Moltke, by a profound sentiment of duty, great experience in the handling of troops, a belief in the impotence of our improvised soldiers, and, finally, by tenacity of a kind to at least double the power of resistance.

General Werder in taking post on the Lisaine, felt

anything but confident. Nevertheless he was able to arrive at success by the employment of the qualities just enumerated.

This is made clear by a dispatch which he addressed to General Von Moltke on the evening of the 14th, as follows:—

"BRÉVILLIERS, January 14, Evening.

"Fresh hostile forces are marching from the south and west against Lure and Belfort. The presence of large detachments at Port-sur-Saône has been established. Upon the front, the enemy to-day sharply attacked the outposts at Bart and Dung.

"In view of these enveloping movements, I beg that the question whether Belfort shall be still held, be considered without delay. I believe Alsace can be protected, but not Belfort at the same time, except at the risk of sacrificing the corps. The necessity of holding on to Belfort deprives me of all freedom of movement. The rivers are passable owing to the cold."

(Signed) "VON WERDER."

General Von Moltke replied at 3 P. M. of the following day:—

"Await attack in the strong position covering Belfort, and accept battle," etc.

3RD.—CAUSES OF THE FAILURE OF THE OFFENSIVE.

a.) *Delays in the March of the Army after the Combat of Villersexel.*

These delays have been explained, and it is not necessary to return to them. They gave the enemy time to complete his defensive organization.

Before assuming command, General Bourbaki had however requested that during his operations in the East, the course of the Saône be guarded, Dijon and Gray strongly occupied for the purpose of securing his

left flank and rear, and large supplies of provisions collected at Besançon. The promises made him in these respects were only partially fulfilled.

The responsibility for the delays in the army's operations after Villersexel should not therefore be laid to the charge of the commander.

b.) *Slowness of the Movements on the Left.*

The cause of this has already been examined. The fear was entertained that an attack would be made from the side of Lure and Ronchamp.

This apprehension no doubt prevented a clear designation to the Crémer Division of the march directions to be followed to the north of the Lure-Béverne-Héricourt road, and hindered decision of the question whether this road was to be appropriated by it or to be utilized by the 18th Corps.

The order for the movement of the 14th said: "The Crémer Division will put itself in march, * * * refraining, if possible, from following that portion of the road from Lure to Chagey nearest the latter village, which is specially assigned to the 18th Corps. * * * This division will, if possible, cross the Lisaine a mile and a quarter above Chagey," etc.

This road as far as Béverne was thus allotted to the Crémer Division and likewise to the 18th Corps. Thence resulted the clashings and embarrassments already mentioned.

It was therefore especially the presence of hostile forces to the north of the Lure-Héricourt road, that is, of the Willisen detachment, which prevented the development of the march, and the consequent turning stroke.

c.) *Inactivity of our Forces after the Combat of Chenebier.*

For reasons which it is difficult to justly estimate, our

army failed to conform to the principle that a retreating enemy should always be pursued, and that at such a time it is essential to assume an energetic offensive.

Often, it is true, success is difficult to discern.

In the case under consideration, the exhaustion of our troops, joined to the weakening of the effective, and an exaggerated estimate of the German forces, sufficed to restrain aggressiveness on our part. But, as we have seen, it was especially the fear of being turned on the left that held the Penhoat and Crémer Divisions at a stand during the 16th and 17th.

4TH.—TACTICAL CONCLUSIONS.

The preceding observations serve to confirm certain tactical principles which may be stated as follows:—

Superiority in artillery will, it appears, henceforth be a decisive element in determining success.

This is not a question solely of a preponderance of guns, but also of calibre, range, and precision of fire.

The principle here enunciated will of itself suffice to explain the majority of our reverses in 1870, and to account for the almost unbroken series of defeats that we suffered. But there are other principles which the operations on the Lisaine more especially illustrate, and which concern both the offensive and defensive.

Offensive.—*The offensive can operate effectively only by possessing precise information upon the strength of the enemy's forces, his positions and their extent, and the preparations he has made for defense.*

This knowledge can be obtained only by keeping up constant touch with the forces of the adversary, and through reconnaissances pushed forward to his principal masses.

In front of strong defensive positions, contact must often be established by means of detachments composed of

troops of all arms, and which possess a certain offensive power.

The first efforts against the defensive line will prove ineffectual, unless combined according to a plan of the whole and pressed with extreme vigor.

Every success should be followed up by a pursuit, which should be commenced at the earliest possible moment, and be forced home with irresistible energy and by all disposable forces.

Defensive.—*Every defensive site should be fortified, and cover should be provided there for infantry and artillery.*

A defensive position should have upon its front the greatest possible number of points of shelter, and, if practicable, a position covered by a natural line of defense should be chosen.

All points of military importance situated between the foot of the position and the line of defense should be stoutly occupied by outposts.

Outposts composed of troops of all arms, sufficiently strong to oblige the adversary to deploy, should be held beyond the front at variable distances, which may be extended to 4 or 5 miles.

Positions constituting a second line should also be prepared in advance.

The defensive forces should be so distributed as to deceive the assailant respecting their effective and the extent of the position held.

Uncovered flanks should be protected by field-works, position batteries, and especially by detachments of troops of all arms furnished with instructions to reconnoitre upon the enemy's wings, follow his movements, and in case of necessity fall back upon the main defensive forces.

The reserves should be as strong as possible, and in condition to move to any point of the line that may be threatened.

All roads in the vicinity that the enemy could utilize should be obstructed, and all points of passage upon the front destroyed.

The resistance should be conducted with the greatest possible energy, and should be characterized by incessant activity and vigilance, and the most determined tenacity. The resisting troops should always be in readiness to seize the offensive.

The combats on the Lisaine show us the ideas of the German generals at this period respecting the proper manner of defending a position. It remains to examine our own understanding of this species of operation at the time.

Among the numerous battles in which we stood on the defensive, there are few that like the action on the Lisaine were entirely foreseen, premeditated, and prepared in advance. The campaign in the North, however, offers us an example. The battle of Pont-Noyelles, indeed, took place under these conditions, and therefore it better than any other permits us to compare our tactical dispositions with those of our enemies.

§10.—Battle of Pont-Noyelles, December 23, 1870.

I.—Situation.

1st.—French Army.

General Faidherbe, appointed commander-in-chief of the Army of the North at the end of November, 1870, on the 3d of December reached Lille from Algeria. His forces were composed of the three newly-formed brigades that had fought at Villers-Bretonneux and Boves. He immediately changed them into three divisions, to which he designed adding a fourth, later, so as to create two corps, the 22d and 23d. Five days afterwards,

December 8, he took the field without waiting for the completion of this organization.

On the third day he learned that the small town of Ham, seized by the Germans a short time before, had just capitulated. General Lecointe, at the head of a flying column from Cambrai, had indeed, succeeded in surprising the town, and in consequence, the dismayed garrison of the citadel surrendered.

General Faidherbe then ordered that a *coup de main* upon La Fère be attempted; and in support of the movement, resolved to turn towards Amiens, at the same time extending his left in the direction of Péronne. He hoped to become master of Amiens before the main forces of his adversaries, dispersed then in the vicinity of Rouen, Havre, and Dieppe, were able to unite. In any event, even in default of success, he counted upon drawing off Manteuffel's attention from Havre.

After manœuvring for eight days between the Somme and the Encre, he called in the Lecointe column, whose attempt upon La Fère had resulted in failure, and on the 16th, concentrated his forces around Corbie. During the succeeding days numerous reconnaissances were made in the vicinity, for the purpose of definitely determining upon the operations to be undertaken by the Army of the North.

For some days, moreover, events seemed to have taken a favorable turn. General Von der Gröben, leaving a feeble detachment to garrison the citadel of Amiens, had abandoned the city itself, relying upon the sufficiency of this guard. It would therefore have been easy for the French to re-enter the place. But, on the other hand, the I. German Army was put in movement, and strong columns were descried in the direction of Montdidier. At Amiens itself, the commander of the citadel threatened to bombard the town at the first news of the

approach of our troops. He even began to carry his threat into execution; and we thus beheld the spectacle, unheard of in the history of other wars, of an open city seized by foreign arms and submissive to the demands of its captors, being bombarded by the latter for no other purpose than to produce intimidation. This was a system of preventive destruction which had not been thought of nor applied by any army up to this time. This state of affairs was fortunately of short duration.

General Faidherbe well understood that if he took advantage of the departure of General Von der Gröben to recover Amiens before having triumphed over the forces of his adversaries, he would expose the inhabitants of the place to fresh barbarities, more harsh and cruel than those which characterized the first days of the occupation. He therefore renounced the idea, preferring, on account of the inexperience of his troops, to take up a defensive position in the vicinity of this town, and there await the onset of the enemy. In this view he made choice of the hills situated on the left bank of the Hallue, an affluent of the Somme, flowing in from the right, at a distance of a little over 6 miles from Amiens.

In this locality a line of heights ran from north to south, their slopes denuded of trees. This high ground gave to occupying troops the advantage of a commanding position with respect to a foe in the valley of the Hallue and the contiguous *terrain*. The culminating ridges constituted a series of salients and re-entrants favorable for a good defense. At the foot of the hills the ground declined gradually, forming substantially a *glacis*, favorable for a destructive infantry fire. Some of the salients, notably those overlooking Bavelincourt to the east and Fréchencourt to the south-east, were crowned with woods, which offered to the defenders excellent points of shelter within 600 metres of the *débouchés* of the valley.

The front of the position was covered by the Hallue, a small stream 5 to 6 metres wide and from 1 to 2 deep, whose banks were lined with trees along the entire course. Numerous villages dispersed over the valley, formed a first line of defense for the Army of the North, upon which, with the aid of field-works, it was possible to oppose a serious resistance to the enemy.

In the last place, the summits of the heights upon the right bank were clothed with numerous woods, advantageous to the defense. Their western borders were favorable to the delivery of an effective fire upon the roads leading from Amiens to the main position.

Three of these roads were particularly important :—

1st. That to Corbie, which crossed the Hallue by means of the Vecquemont bridge, and the Somme by the Daours bridge, 600 metres beyond. [*See Plate XXII. bis.*]

2nd. The Albert road, which, reaching the heights on the right bank of the Hallue at the Bois de Querrieux and traversing this wood, descended toward the stream, and crossed it between the villages of Querrieux and Pont-Noyelles, thence mounting, through a cut, by a steep grade toward Lahoussoye.

3rd. The road to Acheux, which, running in a northeasterly direction, approached the Hallue near Beaucourt, at a distance of about 10 miles from Amiens, and followed this stream to Contay, finally crossing by the bridge at Vadencourt.

It was between the latter village and Daours that General Faidherbe had concentrated his troops.

From December 19th he thus commanded the most important *débouchés*, and covered at the same time his lines of retreat toward the places of the North. His flanks were solidly supported, the one by the Somme, the other by the deeply-embanked valley which descends from Bouzincourt to Vadencourt.

He had just completed the organization of his army, which on December 22d had the following composition:—

22D CORPS (GENERAL LECOINTE).

1st Division (*General Derroja*).

1st Brigade. Lieut.-Colonel Aynès.
- 2nd Battalion *Chasseurs de Marche.*
- 67th Regiment *de Marche.* — 1st and 2nd Battalions of the 75th. / 1st Battalion of the 65th.
- 91st Mobile Regiment (*Pas-de-Calais*). — 3 Battalions.

2nd Brigade. Lieut.-Colonel Pittié.
- 17th Battalion *Chasseurs de Marche.*
- 68th Regiment *de Marche.* — 1st and 2nd Battalions of the 24th. / 1st Battalion of the 64th.
- 46th Mobile Regiment (North). — 3 Battalions.

Artillery: 3 batteries (two of them *canon de* 4 and one *canon de* 12).

2nd Division (*General Dufaure Du Bessol*).

1st Brigade. Lieut.-Colonel Fœrster.
- 20th Battalion *Chasseurs de Marche.*
- 69th Regiment *de Marche.* — 1st and 2nd Battalions of the 43rd. / 1st Battalion of Marines.
- 44th Mobile Regiment (Guard). — 3 Battalions.

2nd Brigade. Lieut.-Colonel Gislain.
- 18th Battalion *Chasseurs de Marche.*
- 70th Regiment *de Marche.* — 1st and 2nd Battalions of the 91st. / 2nd Battalion of the 33rd.
- Mobile Regiment of the Somme and Marne. — 3 Battalions.

Artillery: 3 batteries (two *canon de* 4 and one *canon de* 12).

23RD CORPS (GENERAL PAULZE D'IVOY).

1st Division (*Rear-Admiral Moulac*).

1st Brigade. Captain Payen (Navy):
- 19th Battalion *Chasseurs de Marche.*
- Regiment of Marine Fusiliers, 3 battalions.
- 48th Mobile Regiment (North), 3 battalions.

2nd Brigade. Captain Lagrange (Navy):
- 24th Battalion *Chasseurs de Marche.*
- 72nd Regiment *de Marche.*
  - 1st Battalion of the 33rd.
  - 2nd Battalion of the 65th.
  - 1st Battalion Mobilized National Guards (Arras).
- 47th Mobile Regiment (North). } 3 Battalions.

Artillery: 3 batteries (two *canon de* 4 and one *canon de* 12).

2nd Division (*Mobilized National Guards of the North*).

Four regiments of three battalions each.
Reserve Artillery: Two batteries of naval guns (*canon de* 12).

In recasting this army the principles of the old organization were adhered to. The companies contained 3 officers and 150 men; the battalions were 5 companies strong.

While its reformation was in progress, this army was distributed on the left bank of the Hallue as follows:—

The 22d Corps held the front of the position, its first division (Derroja) extending from Contay to Fréchencourt, its second (Du Bessol), from the latter place to Daours. After due examination of the ground, a principal line of defense was marked out on the slopes dominating the valley of the Hallue, and at a distance from this stream of from 600 to 800 metres. Shelter-trenches for infantry were dug at different points in front of this line. Our troops, moreover, were in possession of the villages situated in the valley, and grand-guards were posted at Beaucourt, Montigny, and in Querrieux Wood.

The 23d Corps occupied Corbie with the Moulac Division, and Albert with the National Guard Division. It thus assured control of two points of passage of the Somme in rear of the army's left flank.

Such was the situation on our side on December 22. During the few preceding days, that of the Germans had also very much changed.

2ND.—GERMAN ARMY.

After the taking of Amiens, General Manteuffel moved upon Rouen, which was regarded as the centre of our resistance and our principal rallying point in this region. He felt obliged to bring to the operation all his disposable troops, leaving as a guard at Amiens only the 3d Infantry Brigade, supported by a brigade of cavalry, three batteries, a company of pioneers, and a company of garrison artillery. These troops were placed under command of General Von der Gröben. On detaching this force, the commander-in-chief furnished it with remarkable instructions upon the line of conduct to be pursued to insure the occupation of the country. They may be briefly stated thus: The office of the Amiens detachment upon the flank of the I. Army is essentially defensive. In order to fulfill the purpose had in view, it should display incessant activity, engage continually in enterprises against the means of communication of the enemy, and the various points of importance in the vicinity; consequently preserve a constantly offensive attitude, and, in particular, menace Péronne whenever it is able to do so.

Manteuffel moved then upon Rouen, which was entered December 6. He now commenced a series of operations designed to prevent the assembly of troops in Normandy, and to lead to the occupation of the ports of Dieppe and Havre at the earliest possible moment. Intelligence of the first movements of Generals Lecointe

and Faidherbe surprised him in the midst of his projects. The direction taken by our columns and the results reached by them scarcely a few days after the contest of Villers-Bretonneux were matters to cause him serious concern, which was shared by the staffs of the neighboring commands and the general headquarters at Versailles.

The appearance of our troops before St.-Quentin on December 8, decided the German detachment occupying the place, to fall back upon Amiens. On the next day the town of Ham was surprised by General Lecointe. The citadel capitulated on the 10th, and by this slight success 200 men and 17 officers fell into our hands. By the same blow the communications from Amiens to Tergnier were intercepted, and General Lecointe boldly announced his intention of pushing upon Noyon, in order to seize the line from Creil to Tergnier, which served to provision the German forces. Our adversaries concluded from all these circumstances that we meditated a direct offensive movement from our places in the North against the army investing Paris, and the communications of the I. Army.

On December 11, we again made an attempt upon La Fère, which failed of success only through an act of imprudence. On this day, the regiment of marine fusiliers of Payen's command suddenly attacked a German detachment, composed of a battalion, a squadron, and four pieces, which General Von der Gröben had, by Manteuffel's order, sent out from Amiens for the recapture of Ham. This force of the adversary, assailed in front and flank, was defeated, and compelled to return to Amiens.

These various events decided the enemy to at once adopt suitable precautionary measures.

The government-general of Rheims dispatched reinforcements to the garrison of La Fère. The Army of

the Meuse directed a detachment upon Soissons. Under date December 13, a communication was sent General Manteuffel from the general headquarters at Versailles, advising him to concentrate his forces at Beauvais until the situation cleared.

Manteuffel, however, did not share this opinion; but before coming to a final determination in a juncture so grave, he wished, first of all, to obtain exact information upon the scope of our movements. He renewed the order to Von der Gröben to regain possession of Ham as soon as possible, and prescribed to him to push his reconnaissances toward Péronne, for the purpose of ascertaining if it was the garrison of this place or the advanced-guards of our Army of the North that had won back the citadel of Ham.

Convinced moreover through the intelligence brought in by his cavalry that our forces were behind the Somme and not in the direction of the Oise, he had already decided to renounce his designs against the places in Normandy, and formed the resolution to march at once upon the hostile assemblies. With this in view, he thought to make a concentration, not upon Beauvais but upon the line Breteuil-Montdidier, whence he would be able to attack our columns in flank, whether they took the road to Paris or to Amiens. He wrote to General Von Moltke to explain his motives and resolutions, and at once put himself in condition to act. The following were the dispositions resolved upon:—

General Von Göben at Dieppe, General Von Kummer commanding the 15th Division at Forges, and General Zur Lippe commanding the Saxon Cavalry Division at Beauvais (recently placed at the disposal of the I. Army), received orders to concentrate on the line Montdidier-Roye. General Von der Gröben was requested to connect with the 15th Division, if circumstances rendered such action necessary.

Conformably to these decisions, the 15th Division went into cantonment at Breteuil and Marseille-le-Petit on December 16. On the same day, Von der Gröben, learning of the arrival of our forces near Corbie, evacuated Amiens, leaving his ambulances there, and a weak force as a guard for the citadel. He moved to Ailly-sur-Noye, and the following day to Montdidier.

The abandonment of the city of Amiens greatly irritated General Manteuffel. He straightway commanded the 3rd Infantry Division under General Von Mirus to re-occupy the place, which it did on December 18. Then, deciding to act without delay, he gave orders, on the 17th, for a concentration.

The 15th Division was shifted to Montdidier, with instructions to await the coming up of the 16th before engaging. The latter was directed upon Breteuil. The cavalry was pushed forward upon all roads where the presence of our troops had been noted, and confirmed the intelligence of their mustering in force around Corbie and Albert. It was therefore evident to Manteuffel that we were moving westward rather than toward the south.

In view of this state of affairs, he directed his forces to draw near to Amiens; and on the 19th repaired to Breteuil. On the next day he moved his headquarters to the former place, and dispatched a force composed of a battalion, a squadron, and six guns, upon an offensive reconnaissance along the Albert road. This small detachment proceeded as far as the wood of Querrieux, from which it discovered our positions. Coming, at this point, upon our 18th *Chasseurs de Marche* and a battalion of the 91st Regiment, it was vigorously attacked by them; and after a slight engagement, which resulted in a loss of 50 men, was compelled to retrace its steps.

This encounter was the very result sought by General Manteuffel. Certain now of the presence of the Army

of the North upon the left bank of the Hallue, he at once concentrated upon the Somme and around Amiens. Public opinion, with characteristic exaggeration, set down the number of our troops at 60,000 men. But the Prussian general, uninfluenced by the reports current upon this subject, made preparations to attack us. The reasons for his decision were simple. In the first place, he had confidence in the tried valor of his soldiers; then, he could not afford to leave a hostile force within only a few miles of Amiens, without compromising the prestige of his arms; finally, according to Von Moltke's instructions, he was to take the offensive against whatever French bodies might present themselves in the open field.

On December 22, his disposable forces were thus distributed:—

The entire VIII. Corps was in hand. The 16th Division (Barnekow) was cantoned at Amiens and to the south-west; the 15th (Von Kummer), at Camon and to the south, with the Corps Artillery. The Cavalry Brigade (Dohna), supported by a battalion of rifles at Villers-Bretonneux, observed Corbie and the upper course of the Somme. This cavalry covered thus the communications of the German army toward the south. Finally, request was made to General Von Bentheim at Rouen to send forward 6 battalions of infantry by rail. In addition to these troops, Manteuffel could rely upon the support of the 3rd Reserve Division, which was to reach St.-Quentin on the 24th from Mézières; and likewise upon the brigade of cavalry under orders of Prince Albert, which had been put at his call, and which on the 22nd had reached Beauvais.

The I. German Army was, then, concentrated and ready to engage. The state of affairs now existing was, contrary to the ordinary probabilities of war, to lead to an entirely foreseen action, offensive on the part of our adversaries, defensive on our side.

II.—Preliminaries to the Action.

1ST.—OFFENSIVE DISPOSITIONS.

On the afternoon of November 22, Manteuffel called to a council of war his chief-of-staff and the commander (Von Göben) and chief-of-staff of the VIII. Corps. He discussed with them his final decisions, and settled upon the following combinations for the next day:—

The 15th Division (Von Kummer) was to take the Corbie and Albert roads and attack our army in front, while the 16th Division, moving toward the north, was to endeavor to outflank it upon the right by the Acheux road. The 15th had instructions to make no attempt to gain the left bank of the Hallue until the movement of the 16th began to make itself felt.

The 3d Cavalry Division, with a strength of only six squadrons and a battery, was to maintain connection between these two divisions.

The general-in-chief kept in hand a reserve composed of the 3d Infantry Brigade, 2 batteries, and a cavalry regiment. He left one battalion at the citadel in Amiens, and in the town itself a small detachment made up of foot-sore men, and 2 companies of *etappen* troops, which were to be reinforced by 3 of the battalions of the I. Corps requested of General Von Bentheim at Rouen. The guardianship of the bridge at Lamotte-Brébière was to be intrusted to the other 3 battalions of the I. Corps, a squadron, and a battery. Lastly, the Saxon Cavalry Division (Zur Lippe) was ordered to Ham and La Fère, and the 3d Reserve Division, to push forward as far as Péronne. Prince Albert was directed to reach Amiens on the 24th.

2ND.—PREPARATIONS FOR THE DEFENSE.

Although at the head of two army corps, General Faidherbe had in reality only three disposable divisions.

Those of the 22nd corps (Lecointe), charged especially with the defense of the left bank of the Hallue, were distributed thus: The 1st (Derroja), from Contay to Béhencourt; the 2nd (Du Bessol), from Fréchencourt to Daours. The latter rested its flanks upon two obstacles difficult to seize: first, on the right, the wood of Parmont, situated upon a sort of advanced bastion, which, descending from the heights of Lahoussoye, is terminated toward the Hallue by steep, shelving slopes accessible only to infantry; on the left, the contiguous villages Daours and Vecquemont, surrounded by marshes and seated in the angle formed by the confluence of the Hallue and the Somme. Upon its front, this division had for the defense of the Albert road, the village of Pont-Noyelles, and that of Querrieux farther to the west, beyond which was the wood of this name. Off to the south was Bussy-les-Daours, located like Querrieux and Vecquemont upon the right bank. To the southeast of Pont-Noyelles, a wide, high ridge commanded this bank, and offered the defense battery sites having an extended outlook. A good road ran along the position, at between 500 and 600 yards from the bottom of the valley, connecting all the villages of the Hallue.

The combat posts had been examined beforehand. The brigades of the Du Bessol Division were in inverted order, the 2nd Brigade (De Gislain) on the right, the 1st (Foerster) on the left.

The latter was charged with holding Bussy, Daours, and Vecquemont. To this end, it placed in first line the 69th Marching Regiment and the 20th Chasseur Battalion. Upon the slopes between Pont-Noyelles and Daours, extended to the right the two battalions of the 43rd, and to the other hand the battalion of marines, which held two companies in Bussy.

The 44th Mobile Regiment of the Guard stood in reserve on the heights in rear.

To the left was Commandant Hecquet, with the 20th Chasseur Battalion. He had orders to hold Vecquemont until the arrival of the Moulac Division, then at Corbie, and had posted 2 companies in the place, 2 in the village of Daours, and the 5th behind as a reserve.

The batteries of the Du Bessol Division were to the north and south of the Albert road, ready to sweep the principal approaches to the position. On the side of Daours, General Faidherbe counted upon the swift concurrence of the Moulac Division, and, in case of need, upon that of the reserve batteries, to check the efforts of the enemy. He had, with this in view, cantoned these batteries at Corbie and La Neuville.

3RD.—FIRST MOVEMENTS.

Very early on the morning of December 23, the 15th German Division (Von Kummer) crossed the Somme by the bridges at La Neuville* and Camon, and toward 9:30 o'clock took the direction of Allonville. At the same time the force designated as a guard for the Lamotte-Brébière bridge moved to its post, and the battalion of rifles that had been stationed at Villers-Bretonneux came upon the field by way of this bridge.

On reaching the Amiens-Albert road, the 15th Division moved upon Querrieux, having in advance the 29th Brigade, and to the right upon the road from Amiens to Corbie, in the direction of La Croix de Landy, a detachment of flankers formed of a battalion (33rd) and a squadron.

When the head of the German advanced-guard had reached the wood of Querrieux, it came into collision with our grand-guards, and firing began. The enemy

* Not the La Neuville indicated on *Plate XXII. bis*, which was in the hands of the French, but another place of this name farther down the Somme, nearly opposite Camon.—TR.

immediately deployed his divisional batteries to the south of the Albert road, and sent a battalion (65th) to Bussy-les-Daours.

III.—Development of the Action.

1st.—COMBAT OF DAOURS.

Our guns broke into fire responsive to those of the enemy; and while this artillery duel was in progress upon the heights, the marines posted in the village of Bussy espied the approach, from the northwest, of four company columns, opening upon the latter as soon as they came within range. The Germans returned the fire, and, taking advantage of the numerous points of cover found on the river bank, succeeded in closing upon the position. A brisk exchange of shots now followed on the flats here, when the battalion of German flankers which had arrived near Vecquemont, seeing that the action had kindled on its left, sent two companies to the scene. The defenders of Bussy thus beheld themselves attacked in flank and front by very superior forces; and, realizing the impossibility of making a longer stand, evacuated the place, which was forthwith seized by the enemy. Toward 1 o'clock our companies of marines rejoined the remainder of their battalion upon the slopes on the left bank.

After the capture of Bussy, General Von Kummer ordered the two battalions on his right to advance upon Vecquemont, putting in support the rifle battalion that had reached Lamotte, and also moving forward to this side his regiment of divisional cavalry to watch the approaches to the village.

Commandant Hecquet was thus, a little before 1 o'clock, assailed by 3 battalions and 5 squadrons. The enemy employed in the attack of Daours all his disposable forces in the vicinity. Nevertheless, with its 4

companies in first line, the 20th Chasseurs vigorously resisted the troops surrounding it. It was soon supported by a marine battery (*canon de* 12), which had hastened forward from Corbie at the first cannon sound, and which now took position beside a clump of trees about a kilometre distant from Daours to the north, and played an active part in the contest.

Despite their numerical inferiority, the chasseurs stoutly defended their post until the arrival of the Moulac Division. The latter entered the line toward 1:30 o'clock, its 1st Brigade (Payen) debouching by the road from La Neuville. The chasseur battalion, whose strength had begun to fail and whose ammunition was at a low ebb, was at once relieved by the regiment of marine fusiliers under Commandant Sibourt, and the combat continuing with renewed ardor, soon acquired extreme intensity. An hour afterwards, Colonel Von Loë, who directed the attack, no doubt fearing his inability to capture the village with the forces at hand, sent word to the general-in-chief of the situation of affairs, and asked assistance. A short time before this, the latter had taken post upon an eminence southward of the wood of Querrieux, whence he was able to judge for himself of the gravity of the combat taking place on his right, and of the necessity for sending forward reinforcements. But instead of drawing upon his reserves, he directed the detachment guarding the bridge of Lamotte to leave this point uncovered and move upon Vecquemont. Two battalions,* a squadron, and a battery were thus added to the active ranks of the enemy. From this moment our inferiority became more and more sensible. Toward 4 o'clock, notwithstanding the

*These battalions had come up from Rouen. General Von Bentheim had not been able, on account of the scarcity of railroad material, to send other troops to Amiens on the 23rd.

courage they had displayed, our marine fusiliers commenced to give way, and soon Vecquemont fell into the power of the Germans. The latter wished to push on and seize Daours, but in consequence of the hot fire that beat against them, were foiled in their attempts. We retained our hold of this village and the struggle continued.

2ND.—COMBAT OF PONT-NOYELLES.

a.) *Defensive Dispositions.*

As soon as the forward march of the German columns became manifest, the forces that were to occupy the centre of our position on the side of Pont-Noyelles, hastened to their combat posts. The Gislain Brigade was to defend the *débouché* of the principal road, that from Amiens to Albert, and its chief in this sense made the following dispositions:—

Three companies of the 18th Chasseur Battalion were at first stationed upon the western border of the wood of Parmont, and shortly afterwards there arrived in support a mobile battalion which had pushed forward without orders as far as Lahoussoye.

The 70th Marching Regiment deployed between the wood of Parmont and the Albert road, fronting Pont-Noyelles, holding on the right the battalions of the 91st, and on the left the battalion of the 33rd. The defense of the last-mentioned village and that of Querrieux was intrusted to 4 companies: 2 of chasseurs and 2 belonging to the battalion of the 33rd. One of the latter companies was installed at Querrieux Wood as a grand-guard. The troops ensconced in the villages at the bottom of the valley had instructions to hold out as long as possible, in order to give the forces in rear an opportunity to come into position.

The Somme and Marne Mobile Regiment was left in reserve, in second line, near the road leading from La-

houssoye to Parmont Wood. The three batteries of the Du Bessol Division were, as has been said, to the north and south of the Albert road, so posted as to be able to command with their fire the approaches to the villages of Querrieux and Pont-Noyelles, as well as the neighboring heights. The Gislain Brigade connected by its left with the Fœrster Brigade.

b.) *Attack of Querrieux and Pont-Noyelles.*

Toward 10:30 A. M. of this day, December 23, the head of the advanced-guard of the 15th German Division, furnished by the 29th Brigade, reached Querrieux Wood, when it was fired upon by the company of the 33rd posted here as a grand-guard. The latter then retired upon the village without opposing further resistance. The enemy seized the wood, lined the eastern border by a battalion (33rd), and deployed his four divisional batteries to the south of the road. An artillery contest then commenced between these 24 pieces and the guns of the Du Bessol Division, while a lively fusillade was kept up in the vicinity of Querrieux between our skirmishers and those of the enemy.

At 12:30 the commander of the 29th Prussian Brigade, judging that the proper moment had arrived for launching an attack against Querrieux, directed a battalion (65th) upon this village by the valley southward of the Albert road. On account of the character of the ground here, this battalion was able to advance under cover as far as the village gardens, and take our companies in flank while they were engaged in making resistance to the force assailing them in front. Surprised by this movement, they fell back, and the Germans, seizing Querrieux, endeavored to throw themselves into Pont-Noyelles. In spite of their numerical inferiority, our companies still resisted for nearly half an hour; then, believing doubtless that the orders received had been

sufficiently obeyed, they retired up the slopes of the left bank, and joined the battalions that had been told off for their support.

The enemy, continuing his offensive, designed debouching from Pont-Noyelles, and attacking our main lines. But he was received by a well-sustained fire from our skirmishers, and forced to renounce his enterprise. Limiting himself on the front to a stationary combat, he established himself firmly in the villages that had just fallen into his hands. The commander of the 29th Prussian Brigade, in correct appreciation of the importance of these localities, hastened to reinforce the troops there by 2 fresh battalions.

c.) *Attack of the Bois de Parmont.*

From this time the contest before Pont-Noyelles resolved itself into an artillery duel and an infantry skirmish, the Germans sheltering themselves in houses and behind whatever other available cover could be found in the bottom of the valley. Toward 2 P. M. one of the batteries of the Du Bessol Division was found to be out of condition to continue its fire. It was replaced by a mixed battery of the reserve, which contended until evening against the numerous pieces of the enemy.

The combat, however, seemed to be making but slow progress. General Von Kummer, commanding the 15th German Division, realized that the day was no longer young, and that the result was still doubtful. Impatient to bring matters to an issue, and hearing a sharp fusillade in the direction of Daours, he concluded that we had made a movement to this side, correspondingly uncovering our centre or right, and that he would therefore be able to prevail in an attack against the height marked by the Bois de Parmont, which from his post of observation near Querrieux, appeared to him the principal *point d'appui* of our line of defense.

In this sense, he threw forward his 30th Brigade upon Fréchencourt, with orders to seize it, and then execute a turning movement by the north. At the same time the 29th Brigade was directed to prepare for a frontal thrust against our positions. The column pushed upon Fréchencourt took possession of the place without difficulty, and endeavored then to ascend the slopes on the left bank.

Witnessing this attempt, the 18th Chasseurs, supported by a battalion of the 46th Mobiles and a battery of the Derroja Division, which had inclined to this side, opened against these new assailants. The effects of this fire and the difficulties of the ground sufficed to bring the enemy to a halt upon the skirts of the village, and to decisively check his offensive. He was not able to get beyond Fréchencourt.

Simultaneously with these occurrences, the German battalions established at Pont-Noyelles were advanced against our lines through the valley situated northward of the Albert road. The six companies charged with making the first effort moved forward resolutely, despite our redoubled fire. At this moment, one of our batteries, in shifting to a more advantageous position, was obliged to leave two pieces to the north of the road. The enemy's skirmishers made their way to the spot, and the safety of these guns was for a brief space compromised. Generals Lecointe and Du Bessol, seeing the danger, at once assembled, the one, the Mobiles of the Somme and Marne, the other, the 70th Marching Regiment, and led them against the enemy, who, under the pressure of these masses, was compelled to give way, abandon the guns, and finally retire to Pont-Noyelles. In this part of the field also, then, the attempts of the enemy had proved abortive; and the defensive strength of the position, when held with the resolution displayed by Du Bessol's troops, was clearly made manifest.

3RD.—ATTACK ON THE RIGHT.—COMBAT OF BÉHENCOURT.

Upon our right, events were slower paced, the attack of our adversaries having been necessarily subordinated to the divergent movement essayed toward the north.

The Derroja Division had assumed its combat posts very early in the morning, its brigades deployed fronting westward.

On the extreme right of the line the Aynès Brigade had thrown out the 2nd Chasseur Battalion for the occupation of Contay and Vadencourt; then came the 67th Marching Regiment, posted between the latter place and Bavelincourt; while farther to the left stood the 91st Mobiles (*Pas-de-Calais*), facing Bavelincourt, with a battalion on the right bank at Beaucourt.

The Pittié Brigade prolonged the line of battle toward the south. The 17th Chasseurs and the 68th Marching Regiment were established upon the lower slopes on the near side of the Hallue, solidly occupying Béhencourt, but holding only a small detachment at Montigny. The banks of the stream were lined with skirmishers. Forming the left of the brigade in question, stood the 46th Mobile Regiment (of the North).

The Derroja Division held a battery to the east of Bavelincourt, near a patch of woods on the summit of the height, another eastward of Béhencourt, and a third upon the left bank opposite Fréchencourt. The latter from its position was prepared to support General Du Bessol's troops in the Bois de Parmont.

While we were engaged in making these dispositions, and the cannonading was kindling in the centre, the 16th German Division (Barnekow) was moving toward the north with the design of turning our right. The part assigned it was very similar to that which devolved upon the Guard and the XII. Corps at St.-Privat. But upon the plateaus of the Hallue as upon those of the Moselle, this combination presented difficulties. It was

necessary, at the outset, to ascertain the point upon which our right rested. Without accurate information on this subject, the columns charged with the turning movement were exposed to error and mischance.

The 16th German Division marched in two columns. That on the right was formed by the 32nd Brigade, with a regiment of hussars and 2 divisional and 4 corps batteries. The left column was composed of the 31st Brigade, with 2 divisional batteries and a company of pioneers. The Cavalry Brigade (Dohna) was moved to St.-Gratien to establish connection between the two divisions of the VIII. Corps.

These columns advanced as far as Villers-Bocage and Rubempré without encountering any of our outposts. Therefore, toward 1 P. M., General Von Göben, the corps commander, halted them and turned their line of march to the right upon Beaucourt and Contay. General Barnekow indicated St.-Gratien to the 31st Brigade as its new point of direction, and Beaucourt to the 32nd. The latter, now forming the left column, with a view to covering itself toward the north, installed 2 companies of infantry and a platoon of cavalry at Rubempré. This detachment was soon reinforced by a regiment of hussars that up to this time had marched at the head of the column.

In consequence of these dispositions, the assault upon our lines was delayed until 2:30 o'clock. At this hour the 31st German Brigade having reached St.-Gratien, General Dohna quitted his post and moved to the left flank of the 16th Division with his squadrons. General Von Göben had prescribed to the 31st Brigade to march upon Montigny and seize Béhencourt, from which place it was to make a pronounced offensive movement upon Franvillers, in order "to avert the attack threatening the 15th Division on its left."

In conformity with these instructions, the 31st Bri-

gade, at the outset, deployed a battalion of the 29th upon the skirts of the small wood of Fréchencourt, which was immediately received by a hot fusillade from the 1st Battalion of the 24th, posted on the banks of the Hallue. A second German battalion advanced then to the left of the first, and was itself reinforced by 2 batteries, while the main forces of the brigade were massed behind the small wood.

Before this hostile array the battalion of the 24th was under the necessity of abandoning the houses of Montigny and then the river banks, finally taking station along the western edge of Béhencourt. The enemy's skirmishers pushed forward to the river and endeavored to cross; but checked in their course by the fire of our recruits, they contented themselves with extending toward Fréchencourt to get in touch with the 15th Division. Soon, however, they succeeded in throwing a footbridge over the stream not far from the latter village, and attacked Béhencourt from the south. The combat then assumed a character of "extreme stubbornness,"* and the 68th Marching Regiment vigorously resisted the forward pressure of the 31st German Brigade. Concurrently, the advanced-guard of the 32nd Brigade arrived before Beaucourt, and meeting no resistance there, sent one of its battalions to support the 31st. This fresh force made its way into Montigny, and co-operated from the north in the attack on Béhencourt; upon which the soldiers of the 24th, who up to this stage had been tenaciously disputing the ground, became apprehensive of finding themselves turned. They gave way, and soon realizing their numerical inferiority, fell back upon their supports. The enemy was able then to seize the village. He established two companies on its northern border, which he defensively organized, and essayed to debouch upon the Franvillers road, according

*German Official Account.

to the instructions received. But the redoubled fire of our infantry forced him to abandon his design. In order to support his left, Colonel Pittié then directed a battalion of the 46th Mobiles toward the wood of Parmont.

On our extreme right the action had been less spirited.

The advanced-guard of the 32nd German Brigade, composed of two battalions and a battery, had, toward 2 P. M., arrived near Beaucourt, which was found to be feebly guarded. The 5th Battalion of the 91st Mobiles (*Pas-de-Calais*) standing here, had not indeed thought it a duty to make a serious defense, and, after a simple discharge upon the head of the German column, fell back upon the slopes rising from Bavelincourt, ensconcing themselves in the trenches of the 68th Marching Regiment.

The enemy forthwith occupied Beaucourt without difficulty, forcing his way thence into Bavelincourt after a brief engagement.

While one of its battalions and its advanced-guard battery assisted in the attack upon Béhencourt, the main body of the 32nd Brigade took station, toward 3 P. M., in front of Beaucourt. Two divisional batteries posted on the height to the north of this village opened fire upon our pieces, and were soon reinforced by the batteries of the 2nd Field Division. The 16th German Division had thus, towards 4 P. M., 48 guns in line against 3 batteries of the Derroja Division. But in consequence of the great distance of the French guns and their more commanding positions, the fire of the German artillery produced little effect.

The enemy did not penetrate beyond Bavelincourt. He had just perceived that we still held a force at Contay and Vadencourt, and that we therefore possessed a *débouché* upon the right bank of the Hallue. In consequence, far from outflanking our right, his own left was

threatened. The day, however, was far advanced, and the 16th German Division could not execute before night the movement for which it had been delegated.

4TH.—RESUMPTION OF THE OFFENSIVE.

Toward 4 P. M. the situation seemed to take a favorable turn for our arms. On the left, the enemy was not able to pass beyond Vecquemont; in the centre, his efforts to debouch from Pont-Noyelles, Fréchencourt, and Béhencourt had been in vain; on the right, we still held our positions. In fine, then, our principal line of defense was intact.

General Faidherbe believed the moment had come for taking the offensive. He gave orders in this sense, and counting upon success, proceeded toward Corbie to join M. Testelin, Delegate of the Government of National Defense, who had gone to this place. Unfortunately, the day was far spent, and the artillery had not been able to sufficiently prepare for the movement to be undertaken. It was, nevertheless, executed with vigor.

On our extreme right, the Aynès Brigade moved forward beyond Contay a small column composed of 2 battalions (65th and 75th) and a section of artillery, under command of Lieut.-Colonel Lignères. It assailed the left of the enemy's line; but soon stopped by the fire of the 36 hostile guns in battery to the north of Beaucourt, finally drew off to the small wood covering this place to the north. The Germans then returned in force, and our men were unable to hold their position; night, moreover, had now fallen; Lieut.-Colonel Lignères was constrained to retire to Contay.

On his side, Colonel Pittié threw himself forward upon Bavelincourt at the head of the available battalions of the 68th Marching Regiment and the 46th Mobiles (of the North), supported in rear by the fractions of the 91st Mobiles (*Pas-de-Calais*) which were serving

with his brigade. This attack succeeded. The enemy, vigorously pushed at Bavelincourt, where he had only an inconsiderable detachment, was compelled to give ground; the village was retaken, and served then as a *point d'appui* for the march upon Béhencourt. Our skirmishers reached the foremost houses of this place, but were unable to occupy them. The Germans had begun to put the village in a state of defense. Soon they found themselves sufficiently strong to wrest from us our position on its edge, and for the second time endeavored to march upon Franvillers. But the fire of our infantry again brought them to a halt, and compelled them to renounce the attempt. Meanwhile night had come on, and we were obliged to restrict ourselves to the occupation of Bavelincourt.

In front of Pont-Noyelles, the fire of our adversaries appeared to grow feeble after the failure of their attack upon Parmont Wood. Their ammunition had in fact begun to run low, and the moment appeared favorable for assuming the offensive. The 70th Marching Regiment was launched against the village, while General Lecointe led forward the Mobiles of the Somme and Marne. A battalion of the 33d and one of the 91st, under the lead of their officers, advanced to the houses of Pont-Noyelles, which they seized after repulsing the Germans, now almost out of cartridges. Unfortunately our young troops contented themselves with this success and failed to defensively organize their post of vantage. Manteuffel, informed of the course of events in this quarter, at once directed two reserve battalions upon Pont-Noyelles, with orders to retake the lost ground. The latter rallied the repulsed troops, threw themselves upon our contingents, and drove them back to the entrance to the village. Both parties then resumed their positions, and night put an end to the combat.

On the left of the Gislain Brigade, Colonel Foerster had also sent toward the valley, between Bussy and Pont-Noyelles, the 44th Mobiles (Guard). This force, coming tardily into action, encountered near the Hallue a German battalion which the commander-in-chief had drawn from his reserve, and being brought to a stand, was obliged on account of the falling darkness to discontinue its offensive.

Toward Daours, the failure of our forward movement was still more sensible. A fresh assault upon Vecquemont had been intrusted to the 19th *Chasseurs de Marche*, seconded by a mobile battalion which was to engage in the valley upon the left. The latter was repulsed by a German rifle battalion, which then from a prepared ambush attacked the *Chasseurs* in flank. Surprised by this counter-thrust, our companies fell back. The enemy entered Daours in their wake, took possession of the place, and succeeded at nightfall in driving back our levies to the heights in rear. He even wished to follow up this success by a further advance; but a demonstration on the part of the Payen Brigade and the fire of our skirmishers prevented him from getting beyond this village. It was too late now to think of a counter-offensive. Daours remained then in the hands of the enemy.

IV.—End of the Battle.

Night put an end to the combats of December 23. Our troops bivouacked on the field, exposed to the bitter severity of the cold, without fires, shelter, or food.

On the side of the Germans, Manteuffel ordered his forces to occupy alarm-quarters* in the villages, estab-

*That is, the troops, though quartered in any houses that chanced to be available, were to remain fully dressed, and in readiness to fall into ranks at a moment's notice.—TR.

lish outposts upon the approaches, retain possession of all the conquered positions from Daours to Vecquemont, and organize them "for a stubborn defense, holding fast more particularly to those on the right bank." The reserve was cantoned at Allonville and Cardonnette. The commander-in-chief himself returned to Amiens.

On the whole, then, if we did not succeed in repulsing the enemy, we at least checked his designs in a drawn battle. Manteuffel found himself face to face with a resultless engagement and a very delicate state of affairs. It was necessary to in some manner bring matters to a conclusive issue.

In the first place it was evidently his duty to follow up his offensive. Now if the strength of our positions precluded all possibility of carrying them in front, on the other hand, their extent estopped him from a renewal of his attempt against our right. Consequently he was obliged, at the outset, to make sure of his footing in the places already seized, and then manœuvre toward our left flank with a view to threaten our line of retreat and force us to abandon the left bank of the Hallue.

This was the combination resolved upon, and he adopted the following measures to carry it into execution:—

The reserve and the detachment posted at Daours, seconded by the 15th Division, were to pass to the left bank of the Somme, and make an assault upon Corbie.

The 16th Division was instructed to retain possession of the captured positions along the course of the Hallue, guard the passages of the Somme from Corbie to Amiens, and hold our troops fast on the front during the attack against our left wing.

The reinforcements applied for in various quarters were arriving. The movement was, then, prescribed for the 25th.

While the enemy was preparing his new plans, our

situation presented a very grave aspect, so grave that it was soon to tie the hands of our general-in-chief, and render a continuance of the combat out of the question. After the rigorous night passed upon their positions, our young soldiers, cruelly tried by fatigue and the losses of a day of combat, and poorly clothed and fed, found themselves indeed exhausted, and forced to recognize the impossibility of delivering a new battle. There were no means of replenishing the ammunition; the mobiles had not sufficient solidity to warrant their employment in the first line; the army could count upon no reserves in rear: in brief, we were not in condition to think of making a longer resistance upon the ground that had been so honorably defended the day before.

General Faidherbe was moreover acquainted with some of the designs of his adversaries; he knew the strength of their reinforcements, and realized that he was able neither to engage in new combats nor maintain himself on the Hallue. He therefore decided to retreat.

After a feeble artillery fire on the morning of the 24th, orders were given to retire upon Albert, and thence to Arras. The movement commenced at 2 o'clock in the afternoon, and continued without interruption from the enemy. On the next day our troops were out of his reach, and soon found in their new cantonments the means of recruiting their overtaxed strength.

V.—Comments.

1ST.—LOSSES.

The battle of Pont-Noyelles cost the Army of the North 1046 killed and wounded, and about 1000 prisoners. On the German side 946 men were placed *hors de combat.*

2ND.—EFFECTIVES.

If we include the accessory services and trains, our adversaries had in line 28,000 men and 108 guns. We engaged them with 3 divisions, numbering about 30,000 *rationnaires*, supported by 66 pieces. Adding to these the division of mobilized militia, scarcely formed at this period, our force did not exceed 35,000 men.

3RD.—RESULTS.

The issue of the battle of Pont-Noyelles, as in case of all indecisive engagements, was differently regarded by the two sides. In the Army of the North it was looked upon as a success, on the evening of December 23. Had we not resisted with advantage all the attempts of the enemy for an entire day? Had we not taken the offensive in turn? For inexperienced troops, at this period of continual reverses, such a result counted almost as a victory.

These estimates of the issue of the action had certainly nothing of an exaggerated character; but from a practical standpoint they were of little value.

On such an occasion, the national mind with us was easily led to reason thus: Our adversaries have not beaten us, therefore we have defeated them. Now, when facts are examined coolly and with the mind strained of vanity, it is seen that satisfaction of this kind is purely moral. The enemy is defeated only when compelled to relinquish his positions; and this truth applies quite as cogently to a passive defense as to the offensive.

Upon the whole, the tactical results of the battle on the 23d December may be stated thus:—

The Germans had captured the advanced-posts on the right bank of the Hallue, and occupied two villages in the valley on the other side. But their attacks against our principal line of defense had failed. The issue of the contest was then indecisive, and under the circum-

stances there was but one thing to do—to renew the action until a positive solution was reached.

General Manteuffel, as we have seen, made preparations in this sense. But he thought it expedient to first await the course of events during the 24th, convinced perhaps that our situation would not permit us to longer continue the contest.

On our side, it must be confessed, the attempts made on the offensive were not crowned with success. This arose from several causes. In the first place, our attack had not been sufficiently prepared for by artillery; and, again, our battalions had pushed directly forward against the villages, instead of seeking to turn them.

Nevertheless, the holding of our positions was a fact beyond dispute, and our young troops had a right to be proud of this result. Unfortunately the retreat that the Army of the North was by force of circumstances obliged to execute on December 24, assured to our adversaries all the advantages of a victory.

These advantages were especially conspicuous in their strategic aspects. The city of Amiens, which we hoped to retake, remained definitively in the hands of the enemy. Our Army of the North was thenceforth cut off from Normandy, and left without means of combining its operations with those of the forces assembled in that region. Finally, and this was the gravest fact, it was necessary for us to abandon the line of the Somme, which so advantageously protected our provinces in the North. In consequence, we a short time afterwards lost freedom of movement in the direction of the German communications. General Faidherbe's march from Arras upon Amiens, threatening as it did the line of the Oise, had demonstrated to the Prussian generals the necessity of covering the Army of the Meuse in the directions of Compiègne and La Fère, consequently of dispossessing us of Péronne, a regular *tête de pont* upon

the Somme. This place was soon indeed besieged, and fell into the hands of the enemy. From this time, the attempts of the Army of the North, though not rendered entirely nugatory, were at least very much restricted.

Our adversaries have, moreover, given their opinions upon these events, and it is proper that we should know them. One of the most impartial is no doubt that expressed by General Von Wartensleben, then colonel, and chief-of-staff to Manteuffel:—

"We should render full credit to the attitude of this army, which was scarcely organized at the time, and to the manner in which it was directed during the combat. We are far from willing to consider this battle a defeat of the enemy, if we mean by this expression a catastrophe followed by a more or less complete tactical disorganization.

"The battle of the Hallue had none the less for us, however, the same significance as an important and decisive victory.

"The villages captured after bloody combats and held in the face of the enemy's vigorous counter-strokes, and the prisoners, amounting to more than a thousand, that fell into our hands, are evidences that this action partook of the character of a tactical success. This consideration is, however, of only secondary importance. The contests of modern times are not solely, as in the tournaments of the middle ages, bloody affrays where deadly blows are exchanged. What was then the aim of battles is to-day only the means of reaching a higher result. Has this result been attained or not? Such is the test by which victory or defeat will be judged. By the action on the Hallue, the commander of the German forces purposed assuring the occupation of Amiens, and dislodging the enemy's army from its positions, which were in threatening propinquity to this place, thereby

fulfilling the task allotted to him of covering the rear of the Army of the Meuse. These two ends were completely gained. It is also proper to suppose that the commander-in-chief of the French army did not design simply to contend with his adversary for a time on the uninhabitable slopes on the left bank of the Hallue. If General Faidherbe's intention was not to seek to raise the blockade of Paris or to disturb the investment from the north, he must at least have aimed at seizing Amiens and resuming the line of the Somme, with a view to a subsequent offensive. The battle of the Hallue had for immediate consequence the casting back of the French army to a considerable distance from Amiens, and led afterwards to the fall of Péronne, the last point of support of the French upon the Somme."

4TH.—GERMAN TACTICAL DISPOSITIONS.

The causes by which such results were brought about cannot be defined with too much care ; and it is especially in the combinations of our adversaries that we must seek them.

If we go back, indeed, to the events of the middle of December, we see that the resolution of General Manteuffel to take the offensive was conformable to the rules of experience, and that such a course held out to him the most favorable chances of success. If we further bear in mind the circumstances under which this resolution was formed, we are impressed by the fact that great force of reasoning and strength of will are requisite in a military leader in such a case. Von Moltke advised a falling back as far as Beauvais ; Von der Gröben had evacuated Amiens ; the government-general of Rheims was impressed by the gravity of the situation and uneasy over the outcome; lastly, public opinion, overexcited, attributed to the Army of the North a strength of 60,000 men, and correspondingly large means of

action. Nevertheless Manteuffel persisted in his idea, because it was logical.

The combination adopted by the Germans to close upon our positions on the Hallue is also of a nature to claim attention. It may be epitomized thus: A frontal blow combined with a turning movement against a wing. It was the attack upon St.-Privat repeated.

This, it is necessary to understand, is the most usual form of the offensive—a problem simple in appearance but always delicate in execution. At St.-Privat there was only one solution—to act against our right wing, since our communications could thus be cut, and for the further reason that our left wing rested upon the fortifications of Metz. Upon the Hallue, on the contrary, both our flanks were exposed. However, in attempting a thrust against our right, the Germans failed of success. Their plan was faulty then; and this fact they themselves recognized, since, on the 24th, when about to renew the attack, they designed moving against our left flank.

One of the causes of the miscarriage of this combination was the difficulty, as at St.-Privat, of discovering the extremity of our line on the right, or, more simply, the *point d'appui* constituting it. Was the duty incumbent upon the German cavalry in this regard well fulfilled? Could it perchance have acted differently? The German authors have not cleared up the doubt on this subject to which the events gave rise.

This much is certain, however, that the operation at the outset led to a very divergent turning movement toward the north, and then to combats tardily entered upon, and to the dispatch of a brigade upon Beaucourt instead of to Contay.

In the distribution of the forces charged with concurring in the attempt against our positions, there are two tactical dispositions which should be remarked: one

relative to the protection of the Lamotte-Brebière bridge; the other, to the formation of a special reserve under the immediate authority of the general-in-chief.

The first of these dispositions resulted from the necessity of holding fast to an independent passage of the Somme, in order to provide for the case of a failure in the attack. All the lines of retreat extended toward the south, and it was essential to assure freedom of movement to the I. Army in this direction.

This necessity being understood, we may perhaps wonder at seeing General Manteuffel withdraw the detachment from Lamotte, toward the middle of the day, for the purpose of advancing it upon Vecquemont. It was clear, however, that control of the bridge of Daours was of more importance to the Prussian General than the retention of that at Lamotte. Moreover, in case of a reverse before Daours, the 5 battalions diverted to this side were so situated as, with the 5 squadrons and the battery accompanying them, to be able to move back upon Lamotte and still assure possession of this point of passage.

As to the special reserve formed by Manteuffel, and installed by him at the approaches to Querrieux Wood, it owed its creation to our adversary's belief in the superiority of our forces. He was then compelled to take into account the offensive movements which the chances of combat might lead us to attempt, and endeavor to adopt suitable measures to insure superiority at threatened points. Events justified this disposition. It was, indeed, owing to the reinforcements drawn from this reserve that Pont-Noyelles was recaptured by the enemy at nightfall, and likewise the attempt of Colonel Foerster near Bussy repulsed.

The combats on the Hallue bring again to view various tactical methods of our adversaries which have already been several times noticed, and which will, therefore, be referred to only in brief in this place.

Such, for example, are: The constant employment of shelter for infantry during the preparation of the attack; the utilization of the folds of the ground, declivities, and valleys, to screen the movements of the infantry; the simultaneous advance against positions from two directions; the promptness of the unengaged forces in going, almost of their own accord, to the assistance of neighboring bodies; the precaution to defensively organize every conquered point capable of affording shelter; the practice formerly so frequently recommended by Marshal Bugeaud, of establishing ambuscades on the side of the *débouchés*, in order to frustrate counter-offensive attempts; the stubbornness displayed in the defense of every advantageous post; the custom of reinforcing troops that had exhausted their ammunition, instead of relieving them; the incessant renewal of efforts aiming at a decisive result; lastly, the feeling of solidarity which urged all arms to concur, with equal ardor, in the common task.

It was the adoption of these practices throughout the entire ranks of the troops, in all degrees of the hierarchy, from the simple *gefreite* to the general-in-chief, that gave our adversaries their surest claim upon victory. It was the junction of these tactical conditions that rendered the enemy so strong for the combat, and which, on December 24, permitted Manteuffel to recommence upon our left flank, with great chances of success, his ineffectual attempt of the 23rd.

5TH.—MARCH OF THE ARMY OF THE NORTH.

General Faidherbe's march from Arras to Amiens was, as we have before seen, effected under peculiar conditions. Our forces had advanced under protection of the line of the Somme, whose marshy valleys constituted a veritable obstacle. They were, moreover, covered upon their left by a flying column, whose pro-

gress caused the German staffs serious concern for the moment. Two incidents of considerable gravity were the consequences of our movements—the capture of Ham and the evacuation of Amiens. These circumstances show what effect a resolute and well-combined offensive might have had upon the cautious temper of our adversaries. It cannot be denied, however, that there was real skill displayed in the direction of the actual operations of the Army of the North. Unfortunately, in view of the scant importance of the results attained, some doubts have arisen respecting the fitness of this army to take the field.

In reality, the offensive march upon Amiens was brought to a close by the adoption of a passively defensive measure. This attitude was no doubt necessitated by the lack of cohesion among the troops and the weakness of their organization.

But under such circumstances was it expedient to go out to meet a veteran adversary before acquiring strength enough to think of attacking him? Again, was the situation of affairs created by the battle of Pont-Noyelles more favorable than that existing before this event?

The only means by which we could hope to triumph over our enemies was by overwhelming them with outnumbering forces; and, according to an old law of experience, the more unpracticed the troops, the more considerable should be the amount of artillery brought to their support. It seems, therefore, that it was necessary, in the first instance, to assemble in the North an imposing army, and equip it with artillery in superior proportions to the supply of the I. German Army.

This result could have been rapidly brought about by concentrating the Normandy contingents in this region, instead of permitting them to waste their energies in isolated and impotent undertakings. But for this there

must have been less urgency for the concurrence of the provinces in the relief of Paris; and before thinking of protecting the large cities, our army should first have put itself in condition to attack and vanquish the enemy in the field, as at Coulmiers.

6TH.—SELECTION OF THE POSITION.

It would have been difficult to select stronger ground than that on the Hallue. The open fields of fire which it offered, the regular fall of its slopes, the situation of its salients and re-entrants, the command which its heights gave of the *terrain* to the front, the resistant strength of its *points d' appui*, the numerous roads by which it was furrowed, all contributed to make it one of the most advantageous positions upon which our armies stood for action in 1870.

Its extent, however, has been criticised. It has been said that three divisions numbering scarcely 28,000 combatants could not solidly occupy a front of 7½ miles. In principle this criticism is just. But when we take a survey of the country, when we consider the relations between the different features as commanded or commanding, and the form of the valleys and heights, we see that General Faidherbe was obliged to choose between the village of Contay and the wood of Parmont as a *point d' appui* for his right. By selecting the former, he might hope to turn the enemy's left; by deciding upon the latter, he was almost certain of having his own line turned. The course of events, moreover, justified his choice. The extent of the site occupied was, indeed, one of the chief causes of the failure of our adversaries.

7TH.—DEFENSIVE ORGANIZATION OF THE POSITION.

We have just seen what were the natural resources of the *terrain*. By examining the use made of them, we

are enabled to institute a comparison between the defense of the Hallue and that of the Lisaine.

In both cases, we find a first line of resistance marked by the villages at the bottom of the valley, and a principal line of defense in rear. But upon the Lisaine, the German troops had orders to stubbornly contest the enemy's advance.

Upon the Hallue, on the contrary, our soldiers were to hold the villages only for a sufficient time to permit the occupation of the position behind. The enemy was thus enabled to seize them without putting forth a very great effort, and by the employment of a comparatively feeble force.

It is probable that weighty reasons determined General Faidherbe to pursue this course; but it is none the less true that, as a rule, a line of sheltered points situated in a valley at the foot of a defensive position should be utilized as a line of resistance and energetically defended.

Upon the Lisaine, General Werder established at a distance of about four miles from the ground where the real defense was to be made, strongly-constituted outposts, which were to retire after having forced our advanced-guards to deploy.

It was possible, as we have seen, to adopt the same tactical disposition upon the right bank of the Hallue. The only difficulty in the way was the inferior quality of our troops.

It was likewise this, no donbt, that prevented the organization of our reserves.

In presence of Bourbaki's army on the Lisaine, Werder kept under his hand all forces not absolutely necessary to man the posts of combat. But when confronted by Manteuffel's army, General Faidherbe had no other reserves than his mobilized national guards, an unreliable body that he could not trust under fire,

and two batteries, which entered the line almost at the beginning of the contest.

8TH.—CONCLUSIONS.

Whatever may be the reflections suggested by the various incidents of the battle of Pont-Noyelles, there is for us, in this action, one fact that transcends in importance all others connected with it—the tactical repulse inflicted by a small army, without strength or cohesion, upon well-commanded veteran troops. The deepest impression, then, that should be made by the combats on the Hallue on December 23, is the contrast between the weakness of our means of action and the power of those of our adversaries. There is here, indeed, a lesson of experience which should not be permitted to fade from the mind: Even with modern arms, improvised troops, animated by a sentiment of duty, and inflamed by patriotism, are able to resist a veteran force, if they are commanded by brave and skillful officers and posted on favorable ground. But to go beyond this, to take the offensive with a view to decisive success, requires, we see, trained soldiers, a solid organization, and the cohesion and discipline possessed only by armies of long standing.

The battle of Pont-Noyelles had, nevertheless, a peculiar influence upon the defense of our provinces in the North. All were impressed at sight of an army of scarcely twenty days' growth stopping the enemy, and contending with him for several hours with advantage. This result aroused confidence. The sight of our young men returning in good order to Arras, ready to resume the field a few days later, revived the hopes that the disasters of Metz and Sedan had banished.

These impressions gave our improvised troops a new idea of their military value, and impelled them to fight until the end of the war with an energy which more

than once elicited well-merited praise from the Germans themselves.

§ II.—NORMAL TYPE OF FORESEEN BATTLES.

The events just considered show that pre-arranged battles are, like chance engagements, merely a succession of efforts. In order to define them and correctly estimate their aim and scope, it will be profitable to give some account of their development under ordinary conditions.

Generally, the action does not fully open at once; there are certain preliminary measures to be executed.

Prelude to the Battle.—The prelusive engagements aim at obliging the enemy to deploy. They therefore take on the character of offensive reconnaissances. They consist in a prolonged exchange of shots between the most advanced troops. Meanwhile, the cavalry attempts to gain the flanks and unmask the opposing forces.

Each side endeavors to lead the adversary to a deployment. The defender has favorable chances of producing this result if he has firmly established strongly-constituted detachments capable of offering a suitable resistance, in advanced positions that the assailant is driven to the necessity of capturing. Under such circumstances, the prelude to the contest may become extremely spirited.

After these preliminaries, the combat unfolds itself.

Development of the Action.—When this first effort has acquired its full intensity, the principal forces successively enter the line. Their aim, at the outset, should be to shatter a part of the enemy's line. To this end all the artillery should be brought into action at the earliest

possible moment. The greater portion of the infantry is after this to take part in the combat; but in the initial period it is the artillery upon which devolves the principal rôle. The infantry masses wait until it has prepared the way before moving forward to the attack.

A second period now commences, when the infantry, coming more and more into line, shares in the action, and develops the effects of its fire. Isolated combats, whose results are sometimes very different, take place upon various points of the battle-field, and continue with greater or less intensity until a substantial advantage has been gained by one side or the other.

Decisive Act.—The moment for the decisive act is indicated by the exhaustion of the forces of one of the antagonists.

The aim of this act is to assure the victory. The means to this end consists in bringing fresh reserves into line, and with them striking an energetic blow. Napoleon had no method but this; it was the violent shock of the troops held in reserve that generally decided success.

Sometimes the decisive act of the struggle is determined by the failure of the supreme effort of the adversary and the retreat which follows this token of his impotence.

In our time, with existing arms and the large masses set in motion, the contest will often be of wider development and longer duration than formerly; from which it follows that the decisive act will not always be clearly distinguished. It will escape notice in the aggregate of events and in the general consequences of the combat, or in the partial engagements, or again, perhaps, on account of the exhaustion of the adversaries and the approach of night.

However, the interest attaching to the immediate dis-

cernment of the issue of the contest is the same as heretofore, for upon it will often depend the importance of the success already reached.

The moment has now come to prepare the last act of the battle.

End of the Combat.—The aim of the final act should be the rout of the enemy and the organization of the pursuit. To this end all the disposable artillery and infantry are brought into action. These arms should develop the full force of their fire, and seek to gain ground upon the enemy's flanks.

Finally, the cavalry, accompanied by its batteries, should make dispositions to bear down upon the beaten army's lines of retreat.

This development of a premeditated battle applies more especially to the offensive. Upon the defensive, the succession of efforts presents another character, of which a sufficient idea has been given by the normal type of defensive combat already described.

FIFTH CHAPTER.

PURSUITS.

§ I.—GENERAL PRINCIPLES.

I.—Definitions.

There are two kinds of pursuits: one of a still intact army that voluntarily retires; the other of vanquished troops which execute a forced retreat.

In the former case, the assailant manœuvres, and redoubles his offensive energy; in the second, he hurls his forces forward and completes the destruction of the enemy.

In reality it is the second case only which permits the execution of that impassioned offensive act called a *pursuit.*

In the first instance it is a question simply of obliging the enemy to accelerate his retreat. The latter now finds himself in a situation, which, without being entirely compromised, offers him but meagre chances of success. He is constrained to fall back upon his depots, or upon his base perhaps, in order to avoid being cut off, to reform his forces, or, it may be, to re-possess himself of a necessary *point d' appui.*

It is usually by manœuvring upon the flanks of such an adversary that the army of the offensive endeavors to render his situation critical—a species of operations that in former times was presented quite frequently, and of which the wars of the First Empire offer remarkable examples.

In 1810 Massena having failed in his attempt to force Wellington's front at Busaco, turned it by way of Boialva and obliged his antagonist to continue his retreat upon Torres Vedras.

In 1813, the Allies, in the same way, manœuvred upon Napoleon's rear to compel him to quit Dresden.

In such cases, the enemy is followed rather than pursued; and it is probable that in the future, operations of this character will become rarer. The present range of military arms permits an army to reach its adversary more readily than formerly, and to force him to stand for battle under penalty of seeing his troops demoralized by the simple effects of retreat—fatigues and losses of all kinds. He will, therefore, almost always be brought to an engagement, to that decisive act which provides a solution for all the perplexities of the situation. We are thus led back to a real case of pursuit—that of a beaten army.

One might almost conclude from this, that the pursuit is but the continuance of the offensive against the defeated force.

Everything tends to induce the belief that immediate pursuits, succeeding the last act of battle, will henceforth be more difficult of execution than has been the case heretofore.

The development of battle fronts, the impossibility of correctly estimating the various incidents of the struggle, the facility which the means of action at disposal to-day afford for prolonging the combat until night, the difficulty experienced by the commander-in-chief in immediately grasping all the results of a contest, and in keeping in hand fresh troops for the opportune moment, are so many obstacles in the way of immediate pursuits.

From all these circumstances, it often happens that a sort of uncertainty follows a day of battle, a forced stop-

page of hostilities, consequently a respite by which the vanquished profits to withdraw his forces and steal away. This is what happened after the great battles of 1866 and 1870.

It is none the less true, however, that the pursuit should be undertaken at the very earliest possible moment, generally on the evening after the battle or on the next day.

The theories put forth on this subject by the Prussians since the war of 1870 should not then be unqualifiedly adopted. It is to be observed, indeed, that the pursuits executed by the German armies in the last two wars were almost resultless. But this gives no warrant to conclude with Von der Goltz that such must almost always be the case.

Under Frederick, the Prussian pursuits, like those of 1866 and 1870, were circumspect and measured. Those of Blücher were as energetic as ours in 1806 and 1809. The Russians, in 1870, pursued the Turks in the valley of the Maritza in the midst of obstacles of all kinds, with a vigor which shows that pursuits may to-day be as rapid, and as fertile in trophies, as in the Napoleonic epoch.

This will come to pass whenever the commander is impetuous, determined, alert, animated by the sacred fire of battle, constantly inflamed, and possesses the power to communicate to his subordinates the passion which sways him and urges him on. Witness Napoleon in 1806, Blücher in 1815, Gourko in 1878.

It will still be possible then for a victorious army to begin the pursuit on the day following the combat, provided the general-in-chief is able to gain in time the information necessary to form a correct judgment of the situation. He should therefore take suitable measures to secure this result. Now, by leaving, when he goes elsewhere, a staff-officer at the point selected as his own

station during the action, and requiring the chiefs of the grand units to send in frequent reports of the course of affairs, the commander-in-chief will generally be able to keep himself well informed. One means of supplementing this information, and whose adoption ought almost to be a matter of compulsion to-day, is to send confidential officers to each corps commander during the combat. Lastly, if the troops occupying advanced positions and the cavalry divisions manœuvring upon the flanks throw forward betimes, and without waiting for orders, patrols to pick up and maintain connection with the enemy, it is not doubtful that the commander will be kept constantly acquainted with the features of the struggle.

The contact established with the opposing forces tends to loosen as the action draws to a close and the vanquished army begins to relinquish its position. If, instead of this, it is maintained with that ardent, tenacious, passionate determination which should always animate the victor, there is no doubt that the pursuit may be immediate.

II.—Aim of Pursuits.

The aim of the pursuit is to complete the success and render it fruitful. If the strife has abated the courage of the foe, weakened him physically, and diminished his moral force, the pursuit should have the effect of consummating his destruction. It is the means of reaching results more important than can be gained by the combat itself; and well directed, it may, after a greater or less delay, bring the war to a close, as was seen in 1806 after Jena, and in 1878 after Sophia and Shipka.

III.—Direction of Pursuits.

In seeking the proper direction to be given pursuits, we learn from history that there is only one practical

method—to find out the points that the enemy has an interest in gaining.

These once determined, all practicable measures should be adopted to anticipate him there. It is no longer a question, as in strategic marches, of threatening his communications, but indeed of occupying them before him. The dispositions to this end vary according to circumstances. Generally, if the cavalry can maintain the contact and relentlessly harass the enemy, the victor will be able to accomplish his object. Yet great results will be attained only by launching the entire army upon the traces of the vanquished forces. It is necessary therefore that it should be absolutely free in its action at the earliest possible moment, that it should have no other important objective to gain, no secondary operation to execute on the flanks.

This granted, the principle which should serve as a basis for the measures to be prescribed is supplied by experience. Efforts are made to extend beyond the flanks of the adversary and forestall him at the defiles he must necessarily pass.

The line of retreat being indicated, the difficult passages where the march may be impeded become known, and the pursuing army will choose the shortest road by which to urge on its columns there.

This is, so to speak, the sole rule by which pursuits should be governed. History attests its application in all highly successful operations of this character.

1ST.—PURSUIT OF THE FRENCH ARMY BY KUTUZOFF IN 1812.

In this year, after the action at Malo-Jaroslavitz, Napoleon was not in condition to determine whether he would be able to again attack the Russian army which he had just beaten; and, believing the Kaluga road closed, headed toward Mojaisk (*See Plate XXIII*). Upon arriving at this point he counted upon starting afresh for Smolensk.

Kutuzoff, on his part, had awaited our onset for two days. Seeing us take the road for Mojaisk, he refrained from following. Knowing that large supplies of provisions had been collected at Smolensk, he concluded that this must necessarily be a point of passage, and therefore resolved to anticipate Napoleon here. For the purpose of harassing the latter and hampering his march, he let loose upon his flanks and rear the Platoff Cossacks, supporting them by the Miloradovich Corps. Then forming the remainder of his army into two columns, he directed one, by way of Medyn, upon Viasma, the other, *viâ* Juchnov and Jelna, upon Krasnoi, thus following the chord of the arc described by his adversary. As a result, our long column was cut, once at Viasma and a second time at Krasnoi, and it was miraculous indeed that it succeeded in crossing the Beresina.*

The direction of pursuits is not always so easy to discern as in this instance. Instead of taking an exterior line of retreat and exposing a flank to attack, the beaten army usually selects the shortest route. It may also happen that there is but one direction open for both pursuer and pursued. In this case, a light column will be charged with the duty of continually operating against the flank of the retreating army, while the principal masses assail its rear-guards and endeavor to retard their progress. Pursuing troops find themselves thus under the necessity of making forced marches.

2ND.—PURSUIT OF THE ARMY OF THE NORTH AFTER THE BATTLE OF ST.-QUENTIN.

After this action, General Von Göben, concluding that General Faidherbe's army had retired upon the places of the North by the most direct routes, on the night of the 19th gave orders for the pursuit in the following terms:—

* General Pierron.

"It remains for us now to profit from this victory; to-morrow we shall move forward to complete the defeat of the enemy.

"The Army of the North seems to have fallen back partly on Cambray partly on Guise. It is essential for us to overtake it before it reaches its line of fortified places.

"To this end it is indispensably necessary that the troops should to-morrow make a march of five miles" [about 23 English miles]. "The infantry will, so far as possible, transport their knapsacks by wagon."

This pursuit, which lasted only 48 hours, did not prevent the escape of our army.

3RD.—PURSUIT OF MACDONALD BY BLÜCHER IN 1813.

There are several means of doubling the rate of march. That adopted by Blücher after his defeat of MacDonald on the Katzbach, in 1813, is particularly worthy of notice. Here are his instructions for the march:—

"AUGUST 18, 1813.

"Each corps will utilize several roads, in order to facilitate the movement.

"The march will be commenced at 5 o'clock every morning and continued until 11. The principal halt will then be made; men and animals will take food at this time. At 3 P. M. the march will be resumed, and kept up until 7 or 8. The advanced-guards are held responsible that the enemy is not lost sight of. They will avail themselves of the evening to cook their food. The engineer companies will march at the head of the columns. Each corps will detach light troops to operate upon the enemy's rear, with a view to cutting or disturbing his communications. The general-in-chief will hold himself with the column under General York."*

* General Pierron, *Méthodes de Guerre.*

A similar method was sometimes employed in Africa, especially by General Yusuf, in pursuing the insurgents with troops of all arms during the hot season.

The march was thus regulated: Reveille at 1 A. M. Departure at 2 A. M. March until 9 A. M., with hourly rests of five minutes. Halt at 9 A. M.; establishment of camp; soup. Tattoo at 10 A. M. Reveille at 3 P. M.; coffee. Departure at 4 P. M. Arrival at camp at 8 P. M.; soup. Tattoo at 9 P. M.

Our troops marched three consecutive days under these conditions, the time of actual daily travel being 11 hours, in which they covered from 25 to 27 miles. On the fourth day they rested.

In 1813 Blücher made several consecutive marches of from 23½ to 25 miles, the time occupied being ten hours.

Notwithstanding these principles and the facts that give them sanction, it may happen that in case of excentric or divergent retreats, the victor, even while maintaining contact, will sometimes find himself embarrassed to discern the proper direction to be taken.

4TH.—PURSUIT OF MARSHAL MACMAHON IN 1870.

After the battle of Fröschwiller, the commander-in-chief of the III. German Army observed that the *débris* of our army followed the Bitche road, and that the Lespart Division took position to the north of it, in order to arrest the pursuit. He at once came to the conclusion that MacMahon, considering the forces composing the Army of Metz as his supports, was moving towards them. It was not until the next day, the 7th, that our masses were descried toward Sarrebourg. It became necessary, therefore, to direct the pursuit upon Saverne. But a simple demonstration on the part of our artillery and infantry before Sarrebourg, on the Bouxwiller road, sufficed to bring the 4th Cavalry Division to a stand,

and to cause it finally to retire. A night march executed in consequence of this collision, put the vanquished forces out of reach of the victors.

5TH.—PURSUIT AFTER THE CAPTURE OF ORLEANS IN 1870.

After the second battle of Orleans, the Germans had still greater difficulty in discovering the right direction to be given the pursuit.

General d'Aurelle had ordered a divergent retreat upon Vierzon and Gien. General Chanzy, on his part, had resolved to march to the Loir with the 16th and 17th Corps, to which the 21st was soon added.

As a result, during the days following the re-occupation of Orleans, the German scouts came across isolated parties from all our corps, to the east toward Gien, to the south in the direction of Vierzon, and westward toward Beaugency.

Chanzy's army was already on the Loir before our enemies found it possible to think of pursuit; and it was only by the vigor of our resistance at the approaches to Vendôme that they were certified of the course taken by our principal masses.

IV.—Composition of the Columns.

To-day, as formerly, the cavalry is always the first instrument of pursuit. But so long as the beaten army is able to place a few guns in line and support them by a weak body of infantry, it will be able to stand off the hostile squadrons.

It is essential, then, that the pursuing cavalry be strengthened by a complementary arm. This arm is plainly indicated. The artillery by itself can produce great demoralization among the forces in retreat, and it enables the mounted troops to act with greater audacity. Its projectiles penetrate the disordered columns, worn out

by the efforts of the preceding days, disperse them with little or no opposition, and throw them into still greater confusion; during the passage of defiles, its blows enable important captures to be made; at night, its fire prevents the enemy from finding rest in his bivouacs, exhausts his last strength, and completes his defeat; on the next day the number of stragglers augments, and the sagging energy of the pursued contributes to render the trophies more numerous and to facilitate the taking of prisoners.

The terrifying effects produced by the German artillery in the ranks of our unfortunate troops that were crossing the Meuse bridge in disorder on the morning of September 1, 1870, will remain as a woful example of the power of this arm in pursuits.

The batteries thus joined to the mounted force have very seldom anything to fear from the artillery and cavalry of the adversary. These two arms have, with the pursuer, great freedom of movement, the power to take the initiative, and, in almost all cases, the choice of positions; while with the army in retreat they are often unable to remain in rear or on the flanks for its protection. This army, indeed, is compelled to send its squadrons in advance whenever defiles are encountered, under penalty of seeing them driven into a corner there.

Finally, in order to give the pursuing cavalry more powerful means of action still, it will frequently be necessary to add to it detachments of infantry, without knapsacks, for the support of the horse-artillery; also, engineer troops to put the difficult points of passage in repair, and, if need be, bridge-equipage sections to restore broken bridges and prepare for the crossing of rivers.

Generally the detachments to which the immediate pursuit is intrusted, comprise important masses of

cavalry, attended by numerous batteries. They are ordinarily supported by an army corps or an infantry division, to which a brigade of cavalry is added if occasion should require it.

V.—Execution of Pursuits.

The first condition of success in pursuits is, as has been said, to maintain contact with the enemy. It is not always easy to gain touch with him, and to-day, perhaps, still less so than formerly; for artillery, supported by a weak body of infantry, will always be able to afford the main forces time to effect their escape, either by a forced march or a change of direction. The contact thenceforth becomes a question of audacity and initiative.

The conduct of Murat's cavalry in 1806 offers us an example in this connection that we should always be proud to cite.

One principle to be observed in the execution of pursuits is that the enemy, after his defeat, should be relentlessly followed up. In the first place, because his *morale* is staggered, and an unexpected move upon him is sometimes sufficient to produce a panic, and change a defeat into a rout. Again, because it is probable that in passing from combat to march formations, the beaten army will be unable to prevent a certain amount of confusion, and the victor thereby be afforded a favorable opportunity to seize its convoys, make captures, and, in fine, realize the very aim of the pursuit.

It may happen, however, that the enemy will be able to effect his retreat in good order. This is the case with disciplined troops, long accustomed to victory, that in their turn have been betrayed by the fortune of war. In such instances, these forces take up good defensive ground, especially upon the approaches to defiles, and

strive to check the pursuer there, in order to give time for the baggage, the cavalry, and the artillery to slip away. The tactical disposition to adopt against such an adversary is to bring a pressure to bear upon his flanks. Simple manœuvres threatening his communications often force him to abandon a position and resume his rearward march.

From the moment the pursuit begins, the victor should attack hostile groups wherever found, often without taking account of their strength, but never neglecting to bring into play all the means of action at disposal; if the retrograde movement continues, he should endeavor to charge his adversaries and envelop them, and to repeat this manœuvre again and again until they are destroyed.

This ought to be for him an impassioned chase, in which all the stragglers should be stopped, disarmed, and immediately sent to the rear.

During pursuits, the sentiments of humanity relax their claim. Pity should be shown the conquered only in those cases where a complete surrender is made. Under all other circumstances, its exercise is contrary to the aim of war, which is the total destruction of the enemy—the only means of obtaining the most substantial, durable, and advantageous peace.

When a beaten army is constrained to evacuate hostile territory, popular uprisings, patriotic proclamations, the recollection of the exactions and cruelties of the invader, and the excitations of fanaticism, are so many elements contributing to the success of pursuits.

Improvised partisan troops may also be utilized to advantage in such cases.

The first concern of the pursued force is to put the enemy on a false scent. A frequently employed means to this end consists in executing a sort of counter-offensive in a direction different from the general line of re-

treat, such a strong position being taken up as shall assure the checking of the enemy until nightfall.

In this case, the assailant should always push forward detachments against the retiring columns, and seek by turning movements to break the force of the new resistance by which the enemy endeavors to temporarily bar his advance.

If the pursuer can be led to follow a wrong course for several hours, this will suffice to give the retreating army a good start. In its distress, such an army has recourse, moreover, to all sorts of stratagems to enable it to steal away from the adversary. It often happens that with this in view it sends back *parlementaires* to announce to the pursuers the conclusion of an armistice. Under these circumstances the assailants should always disregard such declarations, breaking off their fire and their pursuit only upon the order of their chief.

Exceptional circumstances may, however, be presented in the field, which necessitate a setting aside of these principles;—when, for example, it is a question of securing some immediate advantage, such as the possession of a bridge over a stream, the delivering up by the enemy of a fortified place, the occupation of an important strategic point, etc. These cases rarely occur, but if they are of sufficient importance to the pursuing army, the chiefs of the grand units charged with the pursuit should be given full authority to conclude all necessary arrangements of this character.

In order to fully seize the application of the tactical principles relative to pursuits, it is essential to follow one of these operations in detail.

On this subject much interesting instruction is presented by the last campaign of the Russians against the Turks.

§ 2.—PURSUIT OF THE TURKISH ARMY BY GOURKO, IN 1878.

I.—Positions of the Armies.

After the taking of Sophia, January 4, 1878, and Shipka Pass on the 9th of the same month, the Russian army, now master of the Balkans; had only to pursue the Turks, the line of march being upon the hostile capital by way of Adrianople.

Positions of the Russian Army.—The Russian forces at this time were quite widely distributed.

The Army of the Balkans, developed upon a front of about 87 miles, from Sophia to Kazanlik, was formed into four masses:—

1st.—*That of the right*, constituting a real army in itself, under orders of General Gourko, aid-de-camp, comprised 83 battalions, 88 squadrons, 14 sotnias,* and 194 guns.

2nd.—*That of the center*, of which the Grand Duke Nicholas (commander-in-chief of the armies of operation) took personal direction on Januarv 12, had a strength of 52 battalions, 12 squadrons, and 116 guns. This force was divided into two groups of two divisions each, one of the groups constituting the advanced-guard, the other the principal body.

3rd.—*That of the left*, under General Radetsky, who had recently triumphed at Shipka, was composed of 21 battalions, 8 sotnias, and 96 guns.

4th.—*That of the extreme left* was a special flank detachment commanded by General Dellingshausen, 24 battalions and 96 pieces strong.

To the north of the Balkans was the *Army of the*

*The sotnia is the Cossack squadron. It has the same effective, about 150 sabres, as the squadron of regular cavalry.

Lom, under command of the Czarowitz, consisting of 69 battalions, 64 squadrons, and 216 pieces of artillery.

Lastly, there was the Dobrudja Corps.

Viewed with reference to the Turkish lines of retreat, the left of these masses was 87 and the right 155 miles from Adrianople.

Positions of the Turkish Army.—The Shipka army, under orders of Vessil Pasha, had just capitulated. That of Sophia, repulsed by Gourko, was compelled to retreat and divide.

Suleiman Pasha had taken the chief command at a critical moment, and recalled to the south of the Balkans certain troops drawn from the left wing of the Lom force, adding to these, detachments brought forward from Constantinople and others gathered together from various quarters. With the nucleus of an army thus formed, he had essayed to defend the passages of the Balkans.

At the time of the capture of Shipka, he was with his principal force in the direction of Sophia.

Upon learning of the fall of the latter place, he conceived the design of rallying the troops that had been engaged in its defense, and retiring by the valley of the Maritza upon Adrianople, possession of which he intended disputing with the enemy by means of the 40,000 or 45,000 men and 140 guns which he counted upon bringing together.

His forces were at the time spread out from Ichtyman to Otlukioi and Karlova, upon the southern slopes of the Balkans. (*See Plate XXIV.*)

He gave instructions at the outset to the troops issuing from Sophia to rejoin him by way of Samakov and Bania, in the vicinity of Tatar-Bazardjick. Then forming two columns, one of 15,000 men, the other of about 20,000, he directed the first, under command of Fuad

Pasha, from Petritcevo upon Tatar-Bazardjick *viâ* the valley of the Topolnitza. The second column, under his own immediate orders, was to march upon Philippopolis by the valley of the Fiolza.

He purposed defending Tatar-Bazardjick, which had been prepared for resistance, then Philippopolis, and finally Adrianople.

Movements of the Russian Army.—Having learned that the capture of Shipka had produced a sort of demoralization in the Turkish ranks, the Russian commander-in-chief conceived a plan of operations which was simple, and evidently dictated by circumstances. He resolved to allow his adversaries no opportunity to pause, and to successively beat all their detachments without giving them time to effect a junction. In consequence, on January 13, he issued a general order of movement which prescribed the following dispositions:—

Right Column.—General Gourko's force was to direct itself upon Adrianople by way of Philippopolis, extending its columns to the south of the Maritza, in the direction of Haskioi and Demotika.

General Kartzoff's troops, in position upon the northern *débouché* of Trojan Pass, were to march upon Philippopolis and Hermanly. They came under Gourko's orders, and were to connect the right and central columns.

Central Column.—The advanced-guard group, commanded by General Skobeleff II., was to push upon Adrianople *viâ* Eski-Zagra and Hermanly, throw a force to the left for the occupation of Yeni-Zagra, and dispatch upon Suleiman's line of retreat, as soon as possible, a light column formed of a brigade of cavalry, of three regiments, under General Stroukoff.

The special task of this column was to gain posses-

sion of Trnova, Hermanly, and the bridge upon the Maritza, at the earliest practicable moment.

The second group, forming the main body, and commanded by General Ganetsky, was to leave Gabrova and follow the preceding in the character of a reserve.

Left Column.—This column was instructed to make its way to Adrianople, *viâ* Jamboli and the valley of the Tundja, throwing forward a light column composed of a cavalry brigade and 8 guns.

Flank Detachment.—General Dellingshausen was to protect the left flank and rear of the army, and keep it connected with the Zimmermann Corps to the east.

Respecting the entire movement now developing, the question, in brief, was to execute a concentric march upon Adrianople, by which the adversary would be anticipated upon his intended lines of retreat, and at the points of which it was important for him to gain possession. Moreover, dispositions were made to outflank him toward the south.

In reality, on account of the strategic situation, the active pursuit was to be undertaken by Gourko's forces.

II.—Pursuit of the Turkish Army.

Without awaiting orders from the Grand Duke, Gourko took up the trail of the enemy.

After the capture and occupation of Sophia on January 4, he was obliged to allow his troops a day's rest; but he immediately launched his squadrons on the track of the Turks, and on his 6th put the main forces under way.

He possessed at the time but scant information concerning the enemy. He knew that the defenders of Sophia had retired in disorder in the direction of Radomir; that numerous columns were on the retreat from

Petritcevo and Otlukioi toward the Maritza; that the road from Sophia to Bazardjick, *viâ* Ichtyman and Trajan's Gate, was strongly occupied; and, lastly, that the position at Kapoudjik, which commanded the just-mentioned point of passage, was defensively organized, and well equipped with troops.

His leading thought was to maintain the separation existing between the two Turkish groups, which were on opposite sides of the Maritza; then to force the passage at Kapoudjik, and forestall the adversary upon his line of retreat, either at Bazardjick or Philippopolis.

To this end he made the following division of his forces:—

1st. *On the right*, General Wilhelminoff, with a column 8 battalions, 12 sotnias, and 14 pieces strong, was to march upon Samakov, prevent the junction of the remnants of the Sophia army with the masses in movement toward the north, and then gain Tatar-Bazardjick *viâ* Bania.

2nd. *In the centre*, General Schouvaloff, with the principal column, which counted a strength of 30 battalions, 12 squadrons, and 66 pieces, was to concentrate at Vakarel on the 11th, and march upon Tatar-Bazardjick, by Ichtyman, capturing the position at Kapoudjik on the way. (*See Plate XXIV.*)

General Schilder-Schuldner, with 6 battalions and 8 guns, was to turn this position by the north, and second Schouvaloff's movement.

3rd. *On the left*, General Krüdener pushed forward, with 24 battalions, 24 squadrons, and 58 guns, upon Otlukioi, in order to descend thence to the Maritza, and endeavor to intercept the retreat of the defenders of Kapoudjik in the direction of Bazardjick.

The cavalry, with a strength of 44 squadrons and 20 guns, was to concur in the execution of the plans of the Krüdener column by debouching as soon as possible into

the valley of the Maritza, and outstripping the enemy toward Philippopolis.

A group of 7½ battalions, 3 sotnias, and 12 guns was sent to the left to reinforce General Kartzoff.

Lastly, a small occupation force was left at Sophia to guard the army's rear.

The operation began on January 6 by a movement from the right through a country difficult of access.

On the 9th a body of about 15,000 Turks, formed of the defenders of Araba-Konak and Sophia, on the march to Bania with 18 guns, was encountered at Kalkova by General Wilhelminoff, who at once attacked, despite his numerical inferiority.

After a brief engagement, which was commenced rather late, the enemy officially notified the Russian general that an armistice had just been concluded between the belligerents. Two pashas who came before him communicated telegraphic news from Constantinople to this effect, and requested a cessation of the firing.

In the face of such formal evidence, presented by personages so high in rank, Wilhelminoff broke off the action and sent word to Gourko.

The Turkish general had indeed solicited an armistice of the Grand Duke Nicholas; but that was all.

General Gourko then, on the 11th, ordered the contest to be resumed, but not until the turning movement executed by way of Bania by a detachment from Schouvaloff's column should begin to make itself felt.

Two days were thus lost, and although Turks and Russians remained in view of each other upon opposite sides of the Isker, when on the 12th the latter attempted to renew the combat, they discovered that the main forces of the enemy had decamped, leaving only a weak rear-guard in position.

Wilhelminoff forthwith pushed forward upon Bania,

which was reached the same day, but was unable to accomplish anything here further than to join with the detachment whose co-operation had been announced to him.

On the 13th, he continued the pursuit upon Tatar-Bazardjick.

Meantime the Schouvaloff column, having reached Vakarel and Ichtyman on the 11th, had moved upon Kapoudjik, and taken possession of the place without difficulty. From certain heights, the Turkish troops could be seen hastening in good order toward Bazardjick.

The march of the Russians was at this time retarded by the snows, the ice-coated roads, the severe cold, the fatigues of the preceding days, and on account of the necessity of awaiting the progress of the artillery, which advanced with much difficulty.

Farther to the north the Krüdener column had executed a similar movement. Reaching Otlukioi on the 11th, it found this point evacuated by the enemy, on whose trail the cavalry was then launched forward. But the retreating forces had a long start, and the pursuing squadrons could do nothing save to note the disappearance of the hostile rear-guards in the valley of the Topolnitza, partly toward Bazardjick, partly in the direction of Philippopolis.

On January 13, Gourko effected the concentration of his principal masses upon the approaches to Tatar-Bazardjick.

In reality these first operations proved almost barren of results. The two Turkish groups that had fled before the Russian army had succeeded in uniting.

The parleys of the 10th and 11th had permitted them to gain a good lead, so that the pursuers were able to take only 200 prisoners.

The latest information was to the effect that Suleiman

had taken command of the Army of Philippopolis, and that about 20 battalions were in position for the defense of Bazardjick, the approaches to which had been intrenched.

The Russian general, in consequence, made dispositions to attack the place on the next day.

But during the night, flames arising in the direction of the Turkish lines, announced the departure of the enemy. Suleiman had, indeed, resolved upon the abandonment of the town upon learning that the Kartzoff column had come down through Trogan Pass, and gained the valley of the Fiolza, which led direct to Philippopolis itself. His rear was threatened, and it was essential for him to reach the latter place as soon as possible. He then distributed his army into two groups. One, made up of the most fatigued troops, and held under his own orders, was at once headed for Philippopolis; the other, composed of fresh troops from Shumla, was placed under command of Fuad Pasha, and given the task of covering the retreat.

These movements were in progress, when, on the morning of the 14th, the Schouvaloff column entered Bazardjick. Seeing the enemy fleeing on the right bank, Gourko immediately threw forward his cavalry upon the left bank toward Philippopolis, with instructions to reach this city before the Turks. Beyond Bazardjick, indeed, were descried two long hostile columns, which were defiling, one on the plain along the Maritza, the other at the base of the foot-hills north ot the Rhodope Mountains.

There was no hope of outstripping the Turkish columns along their line of retreat except by operating upon the left bank of the Maritza. The pursuers immediately shifted to this side, and the march was resumed. At the close of the day, Schouvaloff's infantry succeeded in gaining Adikioi, an important point upon the

Maritza, where the Turks were able to block the way and bring their adversary to a halt, covering thus the rearward defiling of their forces. But the march of the Russians and the occupation of Adikioi were however to compel them to suspend their retreat and accept battle.

At Philippopolis, Gourko had reached quite as satisfactory a result. His cavalry had, on the evening of the 14th, seized the portion of the place situated on the left bank. This force had, it is true, been cannonaded from the heights on the opposite bank during the afternoon; but the road to Adrianople was none the less cut.

At this juncture, Suleiman learned that Skobeleff's cavalry had already arrived in the vicinity of Adrianople. The door of escape was therefore closed on this side.

He had at one time the idea of transferring his army to this city by rail; but the means of transport were inadequate, and he was obliged to give up the project.

Nothing remained for him but to change the direction of his retreat, and take the road leading south toward Stanimaki, in the hope of then gaining Demotika, and thus covering Constantinople. In case of failure here, he thought to retire toward the Ægean Sea. Unfortunately for him, Gourko was again to render his efforts of no avail.

Seeing the hostile rear-guard within reach, the Russian general determined to attack it forthwith.

Schouvaloff, master of Adikioi, was to cross to the right bank of the Maritza on the morning of the 15th and assail the Turks, while Krüdener was to support him on the opposite side of the river. Wilhelminoff, with the other fractions of the army, was also to pass to the right bank, and engage upon Schouvaloff's right, endeavoring thus to outflank the Turkish left.

Fuad Pasha, forced to engage, had taken position between Karadermen, Karatair, and Kadikioi, his right resting on the river, his left on the heights. Mean-

while the forces commanded by Suleiman had reached the vicinity of Philippopolis upon the right bank.

As a consequence of these dispositions, a sanguinary combat ensued, on the 15th, between the Turkish rear-guard and the Schouvaloff column. The latter saw all its frontal attempts checked throughout the day, and vainly essayed to gain the Turkish left or to overlap it.

It failed in its enterprise, and was obliged to await the concurrence of the Wilhelminoff detachment, which did not arrive until evening. In reality, the Russian army was thus arrested in its course for a whole day.

In the evening the Turkish forces again slipped away, and resumed the retreat.

The Cossacks were then assigned to the duty of keeping touch with the fleeing adversary.

At Philippopolis, the Russians were also brought to a stand. During the entire day Suleiman had kept up a discharge of artillery upon the troops visible on the left bank. The latter found that the Maritza bridge had been destroyed, and were under the necessity of constructing another.

During this cannonade, the principal Turkish columns defiled toward the south, and, on the night of the 15th, Fuad and Suleiman effected a junction, despite the efforts of the adversary.

Gourko had, at this time, an exact knowledge of the number of troops at Suleiman's disposal, and was informed concerning the new direction of his adversary's march. But he did not know whether the force before him constituted Turkey's sole resource. He did know, however, that this army had taken up a strong position to the south of Philippopolis, extending from Dermendere to Markovo, with the mountains at its back, and upon undulating ground favorable for defense. It occupied a front of about 4½ miles, and was able to place 108 guns in line.

The Russian general then divided his forces into two fractions, one to attack the enemy in front and hold him fast, the other to anticipate him upon his line of retreat, and cut him from Stanimaki.

The latter fraction, formed of light troops, comprised the Cavalry Division of the Guard, which on the 16th was to cross the Maritza at Papazli, below Philippopolis, and move upon Stanimaki; and a division of infantry, reinforced by a brigade of horse, which had orders to take the same direction, and outflank the adversary on the right.

These dispositions led to a new battle, which took place on the 16th, lasting throughout the day. The Turkish force, notwithstanding its numerical inferiority, made a stubborn resistance to the pressure of the Russians, at one time even assuming the offensive against their right, and finally checking their efforts along the entire front.

On the evening of the 16th, Suleiman directed a resumption of the retreat upon Stanimaki. But in attempting this, his columns encountered, at Karagatch, the cavalry brigade which preceded the infantry division delegated to act against their rear. A violent conflict immediately ensued. The Russian horsemen, unable to advance, were obliged to await the infantry, which, although not arriving until night, nevertheless renewed the attack. The Turks defended themselves with courage, giving up Karagatch only after a bloody contest.

A regiment of Lithuanians, already reduced to 1050 men, here sustained a loss amounting in case of the officers to 33 per cent., and to 20 per cent. of the rank and file.

Notwithstanding, the success of the Russians was decisive. The Turks retired in disorder, leaving 23 guns in the hands of the enemy. In decamping, they set fire

to the houses of Karagatch; and General Krasnoff, to whom the honor of this victory is due, finding it impossible to gain shelter for his men in the midst of burning dwellings, was forced to evacuate the place.

He fell back with his trophies and wounded as far as Belenitza to give repose to his troops, much weakened by their recent brilliant feat of arms.

Meanwhile, Suleiman had made his way to Stanimaki with about half of his forces. He had prescribed to Fuad to move with the remainder to Karagatch and defend the place to the last extremity, in order to cover the defile at Belenitza, and the retrograde march of his [Suleiman's] columns.

Fuad was in position on the morning of the 17th, still ready, after two days of conflict, to meet the assaults of the Russians. It was not until this time that Gourko learned that he had had in his front for several days the last organized masses of the Turkish army. These were making an attempt to escape toward the south. The Russian general did not hesitate, but pushed forward all his available cavalry upon the roads between Philippopolis, Stanimaki, and Adrianople.

He then gave orders for the re-occupation of Karagatch. Despite the exhausted condition of his troops, Fuad, with a force of from 15,000 to 20,000 men, resisted for a portion of the day the 50,000 assailing Russians. But as night fell, the latter succeeded in turning his position by the commanding heights to the south.

Disorder then held dominion in the ranks of the Turks. They gave way, and were soon flying to the rear in all directions. Numerous bands of fugitives, engulfed in the passage at Belenitza, became a prey to a withering fire for the space of a half hour. During the night the fragments of Fuad's force dispersed among the Rhodope Mountains, leaving in the hands of the victor 47 guns, 2,000 muskets, 16 ammunition wagons, and a large amount of war equipage.

Fuad's detachment now ceased to exist as an organized force.

The next day Gourko gave stimulus to the pursuit of Suleiman. Twelve squadrons with six guns were dispatched as a flying column upon Stanimaki. They found traces of the enemy here, but were unable to close with him. It was essential to move eastward and gain Ketenlik. The detachment marched during the entire day of the 18th, and set out again in the night, after a brief pause. On the 19th it continued the pursuit, and at Karadjiliar found the artillery that Suleiman had abandoned in order to accelerate his flight. Fifty-two guns thus fell into the hands of the pursuers; but they were obliged to come to a halt for the purpose of giving rest to men and horses.

Moreover the enemy's trail was lost. Some days afterwards, however, it was discovered that he had escaped far south with his last tabors,* gaining the Ægean Sea by way of Mestanly.

The pursuit was ended, and it was time. The Russian troops had been urged to the extreme point of endurance, and Gourko, after these fresh exploits, recognized the necessity of giving his regiments a four days' repose around Philippopolis. He profited by the halt here to rally his troops and establish a small occupying force in the place.

On the 22nd, he resumed the forward movement in three echelons, and still resorting to forced marches to prevent the Turks from gathering new means of resistance at Adrianople, gained this place on January 27. A cavalry detachment from the central column had already been in position here for several days.

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*Battalions.

III.—Comments.

1st.—RESULTS.

The consequences of General Gourko's operations were of a decisive character. The army of Suleiman Pasha was no more: one part had been completely overthrown, and the other dispersed, and compelled to flee beyond the theatre of operations. A hundred and fourteen guns, nearly the entire artillery of this army, had been captured; but the adversary had succeeded in taking only 2000 prisoners.

The valley of the Maritza, with all its important cities, was in the power of the Russians.

Adrianople had been occupied without opposition. Finally, the road to Constantinople was open.

These results had cost the Russians only 1320 men killed and wounded. But the number of the missing, in consequence of the cold, fatigues, and sickness, was considerable.

2nd.—TACTICAL METHODS.

The pursuit was undertaken against a beaten army, but one by no means discouraged, and which was still capable of making an energetic resistance, as was evinced by the combats of January 15, 16, and 17.

It was effected in conformity with principles, and has especially placed in relief certain tactical rules, which may be stated thus:—

1st. In pursuits, contact should be taken and maintained with the utmost vigor.

2nd. The pursuit should be incessant and unrelenting.

3rd. It should always be pushed home.

4th. The pursuing army should endeavor to gain the flanks and rear of the adversary.

5th. If it have at its disposal a short-cut road by which he may be forestalled at the points he has an in-

terest in gaining, it should attempt to bring him to a stand by frontal attacks, while light columns work around upon his line of retreat.

It was thus that Gourko anticipated and outflanked Suleiman, first at Adikioi and afterwards at Philippopolis.

6th.—Cavalry should be the prevailing arm in the flying columns intrusted with the advance pursuit and the duty of keeping up the contact. Horse artillery should be joined to it in liberal proportions. An infantry grand unit should, whenever possible, follow and support these columns.

General Gourko's pursuit presents us with no unfavorable incident save that respecting the negotiations of January 9 on the subject of an armistice which had no existence. As to the retrograde movement from Karagatch to Belenitza by the troops that had fought the brilliant night combat of the 16th, it had become a necessity. General Krasnoff, the author of the measure, far from receiving blame, as some German writers would have it, was mentioned in orders and decorated for his able conduct of affairs.

The most prominent characteristic of these marches, battles, and desperate struggles, and the protracted efforts which they necessitated, is the energy put forth by the Russians.

For thirteen days, from the 6th to the 18th of January, they marched, without rest, through a difficult country, over poor roads, in the midst of snows, during severely cold weather. Under these circumstances they covered 140 versts [nearly 93 miles] from the 6th to the 16th, and engaged in violent combats for three successive days.

The length of daily march was in no sense extraordinary, but it was not possible to exceed this speed on account of the enforced slowness of the artillery, which had to be waited for in nearly every instance.

From Philippopolis, Gourko's army made the march to Adrianople in six days, traveling 180 versts [about 120 miles] without pause, or at a mean daily rate of 20 miles.

The official report of the general-in-chief did not fail, however, to set forth the rare example of vigor and endurance displayed by his troops during the comparatively few days they had taken to annihilate the last organized forces of the Sultan to the south of the Balkans.

The success of the Russians was the more remarkable as they had to deal with an experienced antagonist, whose energy and courage had enabled him to resist for a remarkably long time the causes of demoralization at work in his ranks, and who had fought to the last extremity, despite the crushing numerical superiority of his adversary.

SIXTH CHAPTER.

RETREATS.

§ I.—GENERAL PRINCIPLES.

I.—Definitions.

Retreats are voluntary or compulsory.

Voluntary Retreats.—These result from a strategic situation which obliges an army to retire without having been beaten, and to abandon its positions, in order to take up more advantageous ground in rear.

Wellington in 1810, falling back from Viseu to Torres Vedras, executed a voluntary retreat.

It was the same with Werder in 1871 when he quitted his position at Vesoul to take post on the Lisaine.

Retreats of this character will probably be of rarer occurrence henceforth. In presence of a well-organized and energetically-led army, it will indeed be difficult for the other side to avoid being drawn into action. The mobility and range of modern artillery will almost always permit the pursuer to reach the retreating columns. The power of the arms at his disposal will soon give such intensity to a combat that the retiring force will be obliged to reply, then support the troops thus engaged, and finally stand for battle.

On the next day, if this force abandons the field to continue its retreat, the soldiers will believe the movement the result of defeat; the enemy, on the other hand, will think himself victorious, and will gather all the advantages of success.

If instead of resisting an attack of this kind, the retiring body quickens its march, the effect will be still worse.

A voluntary retreat can then be undertaken only when there is certainty of being able to hold the enemy at a distance, and of having the requisite time and space in which to carry out the design in good order and without obstacle.

We are thus led to consider forced retreats as the general case; voluntary retreats as the exception.

The tactical principles which apply to these two sorts of movements present, moreover, little sensible difference. It will consequently be sufficient to study the means of executing compulsory retreats.

Compulsory Retreats.—To successfully retire a beaten army, is one of the most difficult operations of war. In modern times, the perplexities of the situation have still further increased. Existing arms, indeed, more readily than was formerly the case, permit the contest to be prolonged until the exhaustion of the forces; the troops are younger and less hardened to service; the masses are more numerous, the impedimenta more unwieldy.

II.—Execution of Retreats.

1ST.—THE MOMENT TO BEGIN THE RETREAT.

The retreat is ordinarily executed after the loss of a battle. It should be decided upon at the moment the general-in-chief finds himself forced to throw in his last reserves. However, if his ranks are not in disorder, if the struggle is still indecisive, the day well advanced, and succor likely to arrive on the morrow, he should not think of resorting to this extremity. This final measure should be determined upon only when it becomes clearly impossible to hurry to the combat the

disposable forces in rear, and when there remain to the commander-in-chief only the supports necessary to protect his withdrawal from the field. He ought in the latter case to resolve upon this movement in sufficient time to avoid the disorder which usually sets in when the *morale* of troops is impaired.

The war of 1870–71 presents a variety of examples in this connection. One of the most instructive is given us in the closing act of the battle of Coulmiers.

The moment came when General Von der Tann, commander of the I. Bavarian Corps, victorious until then, was obliged to resolve upon retreat.

Captain Hugo Helwig, of his staff, has made known the tactical considerations which dictated this decision.

"Between 3 and 4 o'clock the commander-in-chief found himself reduced to the alternative of holding out to the last man and the last cartridge in the hope of thus prolonging the action until nightfall, or of profiting from the advantage gained in the right wing, and the situation of affairs in the 3rd Brigade, which was still intact, to undertake an immediate retreat.

"The first combination would have led to the complete exhaustion of the entire force and to enormous losses; and if in the long run it became necessary to give way, and if the adversary, as it was proper to suppose, had fresh reserves at disposal, such a retreat would have shattered the tactical bonds of the troops, and the movement would soon have been converted into a rout.

"The commander-in-chief could not have continued his effort here without the certainty of being able to bring up reinforcements of such strength that they would have been able to recommence the struggle on their own part on the following day.

"The nearest force was the 22nd Division; but this was at Boves, ten hours' march from the battle-field.

"The consideration could not be ignored that on the

next day the enemy would no doubt make assaults with forces coming from the south and the east."

Retreat imposed itself then as a necessity; and the proper time to order it was when no troops remained intact but the last reserve.

2ND.—END OF THE COMBAT.

At the hour of final crisis, the forces, for the purpose of retiring from the combat, must pass from the deployed order to the order in column. This movement can not be executed on the battle-field except with the greatest difficulty. In each engaged unit it is essential to rally the skirmishers, the isolated groups, the elements which are commencing to lose their cohesion. To effect this, it is necessary to constitute in each regiment a supporting body. Finally, the divisional artillery should prepare to make suitable dispositions to enable it to break the force of the enemy's advance.

At this critical moment, the latter is unremitting in his efforts to move to the front, and the discharges delivered from his side of the field redouble in intensity. The masses already rallied will often be exposed awhile longer to the murderous effects of this fire. More than ever are disorder and the rout that follows it to be feared.

To shake off the enemy's grasp during a combat is, then, one of the most difficult feats of war, and the violence of the fire of modern arms increases the danger of the situation. If this act is delayed until the beaten force gives way of its own accord, its ruin may be the consequence. To prevent this, the reserves should be called upon to deliver a counter-blow, which will have the effect of checking the impetuosity of the adversary. Looking at actual cases of retreats, we observe that the generals place the disposable elements of the reserve upon the points commanding the *débouchés*, prepare to

sacrifice several regiments of cavalry, and lastly demand the most energetic efforts on the part of the artillery. While upon the latter arm devolves the duty of opening the battle, it will also be more than ever necessary for it to develop great resistant strength at the end of the action, for the purpose of assisting the main forces in slipping away.

All the available guns, then, concert with the engaged reserves.

The combat seems to be stimulated anew, as upon the arrival of fresh troops.

The artillery, which is supported by the infantry units remaining the most compact, becomes at this juncture the principal arm.

To be convinced of this, we have only to refer to the battles of Sadowa and St.-Privat.

On July 3, 1866, an Austrian battery of more than 100 pieces remained in position upon the heights on the right bank of the Elbe, carrying tenacity and devotion even to the point of sacrificing its guns, in order to check the enemy and permit the beaten army to escape by the passages of this river.

Near the close of the battle of St.-Privat, when the 6th Corps, overpowered, fell back toward the wood of Saulny, the Germans would have been able to inflict a disaster upon us, had they not been held at bay by the 108 pieces of artillery which, under the protection of the Picard Division, had taken station between Marengo Farm and Amanvillers Quarry.

The artillery ought, then, after the retreat has begun, to hold out to the last extremity, so as to assure the safety of the army.

While the batteries and the reserves are making a last effort, it is indispensably necessary to accelerate, by all possible means, the evacuation of the position.

Experience has demonstrated that a retiring army

should at such a time make use of all disposable issues from the field and multiply its columns, to enable it to get its troops out of the way with the utmost speed; and that diverging roads are often utilized at the commencement of such a movement. These courses are abandoned later for others which converge toward the places of assembly.

It is then useful to send out staff-officers upon the different roads to guide the various bodies, and to prevent them, in changing the directions of their march, from occasioning a blocking up of the way—a situation full of peril for such an army.

Finally, the time arrives when the reserves themselves are to retire. It is now that the leaders have need of all their coolness, and that the troops should display exceptional steadiness in order to form into echelons designed to hold the adversary off, without compromising the retiring bodies. Here again the artillery exercises a preponderating influence.

3RD.—MEANS OF SCREENING THE RETREAT.

We see from the preceding that the best way to commence a retreat under the fire of the enemy, is to seek to prolong the action until nightfall by all available means. The rearward movement may then in many cases be disguised. If it is possible for the rear-guards to maintain themselves upon the field of combat or upon a position in the vicinity on the following morning, and if the cavalry force instructed to keep the bivouac fires burning until day, is able to carry out its task and then slip away, there will be almost absolute certainty of deceiving the enemy and of getting off to a sufficient distance to prevent him from again picking up contact.

With modern arms and proper supplies of ammunition, a force should succeed in protracting a contest and keeping the adversary at a distance. But there is never

certainty of being able to continue an action until night. And, as has been said, a struggle maintained to the point of complete exhaustion of its forces, always exposes the beaten army to disaster.

The retreat of MacMahon's corps, on August 6, 1870, after a glorious resistance pushed to the utmost limit, is an instance of this.

After the battle of La Rothière, Napoleon screened his retreat by stationing Marmont's corps in a combat position upon the flank of the direction taken up by the other forces. This position covered, moreover, his passage of the defile formed by the Lesmont bridge, leading across the Aube. The operation was completely successful.*

From this example may be drawn the following conclusions:—

1st. *An intact force is always necessary in order to cover a retreat.*

2nd. *A retiring army which has defiles to cross, should establish its rear-guards in a position threatening the enemy's flank.*

These form then an offensive crotchet upon the adversary's line of pursuit, and oblige him to attack, consequently to abate his speed, under penalty of being assailed in a disadvantageous situation.

Again, an army may be forced to beat a retreat after prolonged contact with the enemy, during which has taken place a series of combats that has weakened its troops, and while it is still in presence of the outposts of the opposing army.

History informs us that the means most frequently adopted in this case to cover the retreat, is to make a forward thrust upon the enemy and then hasten the columns to the rear behind a screen of cavalry, leaving

* General Pierron, *Méthodes de Guerre.*

in position rear-guards supported by a strong force of artillery.

Masséna employed this manœuvre in 1811 in front of Wellington; and Chanzy repeated it more than once in 1870.

4TH.—DIRECTION OF RETREATS.

After retreat has been resolved upon, it is essential to determine its direction—a question that must nearly always be settled in the midst of the most critical circumstances.

Experience has proved that there is one general rule to be followed in such a case:—

An army should always retire upon its supports.

This principle was expounded in a remarkable manner by Napoleon on many different occasions, notably in 1808.

The Dupont Division had just capitulated at Baylen. The situation of our troops in Spain seemed compromised; and King Joseph believed it necessary to evacuate Madrid and retire to the Ebro. This was, indeed, to retreat upon the reinforcements which were arriving from France. But after reaching the Ebro he conceived the idea of assembling all his forces (by which he hoped to form an army of 50,000 men), abandoning his communications with France, and making movements to the various points where the enemy might show himself or where provisions were to be obtained.

He submitted his project to Napoleon, who thus replied:—

"CHALONS-SUR-MARNE, SEPTEMBER 22, 1808.

"The preservation of the line of operations is imperative in order to hold connection with a depot—the place of rendezvous, the magazine of supply, and the point where prisoners and the wounded and sick may be sent.

"To shut one's self up in the interior of Spain at this

time, without an organized centre or well supplied magazine, exposed to the risk of having the enemy's armies on the flanks and rear, is to be guilty of a folly unexampled in the history of the world.

"* * * * Those who venture to advise such a measure would be found the first to lose their senses when events had made clear the folly of the operation."

It is then upon the point where it may re-form its forces, secure new resources, and receive fresh support, that an army should retire.

The support sought is not always to be found in the direction of the depots, but rather upon the *points d'appui* which are held in communication with them. In this case, this support will sometimes be represented by another army or a group of armies; or again, indeed, by a fortified place or simply a centre of supplies.

In 1870, Marshal MacMahon's natural line of retreat after Fröschwiller was upon the Metz army, as that of Von der Tann after Coulmiers was toward the army investing Paris. The route taken by General Frossard upon Sarreguemines, after Forbach, was excentric, and exposed him to serious dangers. His supports were at Metz; thus he bent his course toward this place, beginning with August 7.

In any event, one of the essential conditions of retreats is that they must be short, under penalty of exposing the army to disorders and soon to disorganization.

5TH.—ORDERS FOR THE MOVEMENT.

When the action has been broken off, and the direction of the retreat resolved upon, it remains to carry the movement into execution.

If the withdrawal takes place at the close of a day of combat, the arrangements to be made will, of necessity, be few in number. They will in most cases be confined to a general indication of the direction, and to the des-

ignation of the rallying-point and the troops that are to protect the movement.

It may even happen sometimes that it will be impossible to do more than merely specify the rallying-points, as was the case after Fröschwiller.

But if there be time to make the necessary dispositions and issue the instructions required by the situation, the first care of the general-in-chief will be to determine the places at which the enemy may endeavor to anticipate him. It is essential to occupy these coveted points before the main forces arrive, especially when they form defiles. In this case, the convoys and the cavalry are always foremost in effecting a passage.

Regarding the other measures to be prescribed in the order for the movement, they will ordinarily bear upon the following points:—

1st. The distance in advance to which the trains and their escorts are to be sent.

2nd. Indication of the troops that are to set off first; the roads to be followed; the means of keeping up connection between the various bodies.

3rd. Designation of the forces that are to cover the retreat and to form the rear-guard.

4th. The detachments to be held upon the flanks, and the engineer troops to be assigned to them.

5th. The service of surveillance respecting the pursuing enemy.

6th. The parties to be sent ahead to prevent destruction of the bridges.

7th. The route to be followed by the commander-in-chief, and the reports to be rendered to him.

8th. The steps to be taken to insure the protection of the railway stations in the rear and the moving back of the rolling stock.

9th. The detached bodies to be drawn in.

10th. The things to be destroyed, particularly upon the rail lines.

11th. The notices to be sent the commanders of towns and forces in the vicinity and likewise the officers in charge of the *etappen* service, and the preparations to be made for entraining the troops.

12th. The removal of *matériel* and munitions from the depots.

13th. Lastly, special recommendations, which will usually relate to the duty devolving upon the rear-guard, to the formations for the march, the discipline and order to be maintained in the columns, and the defensive positions to be occupied.

To properly regulate the composition of the rear-guard is a matter calling for the exercise of particular care. There hardly exist rules on this subject, and yet the experience of the last wars seems to make it clear that henceforth the strength of rear-guards should be increased with respect to the elements of each arm, especially the artillery.

Everything seems to indicate, also, that save where there are defiles to be passed, important artillery groups should be left within reach of the supporting troops.

After Coulmiers, General Von der Tann employed as rear-guard more than a quarter of his effective. It comprised a brigade of infantry, a brigade of cavalry of three regiments, and three batteries of artillery.

After Villersexel, General Von Werder covered his march with the half of his forces.

Sometimes the means of action put at the disposal of rear-guards is not sufficient to dull the edge of the pursuit. It is here essential to have recourse to stratagems. In this case, ambuscades, skillfully prepared, may serve to teach the pursuer a lesson and lead him to moderate the ardor of his advance.

Recent experience appears to have demonstrated, further, the necessity of each day taking up a strong position, if it be possible, and bringing into play there all the means of resistance at disposal.

The order issued by General Bourbaki on January 17, 1871, at the time of undertaking his retreat upon Besançon, provided for dispositions which, in this regard, furnish useful instruction.

"HEADQUARTERS, AIBRE, JANUARY 17, 1871.

"To-morrow, in the day-time, and also during the night if need be, after the distributions of food and forage have been made and the ammunition has been replenished, all the convoys and parks will put themselves *en route;* the various bodies will take with them only the combat artillery.

"The convoys and parks should always be held at a day's march to the rear.

"During the retreat, the military engineer force will march with the rear-guards, for the purpose of effecting whatever work of destruction may be necessary. The civil engineers will be a day's march in advance, in order to apprise the inhabitants of the approach of the various bodies, assemble the resources of the country, establish defences, and prepare means of destroying masonry work.

"Corps commanders will give the civil and military engineers all instructions necessary to carry out the duties assigned them.

"In the orders for the march issued by the corps commanders, should be indicated the number and kind of troops which are to constitute the rear-guards; and the departure of the forces should be so regulated that all these rear-guards may be set in march at the same time, 8 o'clock A. M.

"The general-in-chief expressly recommends that the daily positions occupied by the troops be protected by defensive works of some strength.

"The General-in-Chief,

"BOURBAKI."

In order the better to seize the application of these rules, and to complete them, let us refer to the details of some of the most recent retreats.

III.—Werder's Retreat to the Lisaine in 1871.

When, in January, 1871, Werder learned that a new French army had arrived upon the Doubs, he resolved to quit his position at Vesoul for another on the Lisaine, which he had already put in a state of defense.

This was a voluntary retreat, demanded by a state of affairs the serious aspect of which was aggravated by the unexpected appearance of Bourbaki's army.

After a first rencontre at Villersexel, in which his efforts were repulsed, Werder drew off to Aillevans, to the north of the town, and there awaited our attack.

Toward 11 o'clock, seeing that it did not take place, he commenced his retrograde movement.

Since the previous day, appropriate dispositions had been adopted to insure the successful execution of the operation.

The object of the march was to forestall us upon the Lisaine. For the purpose of rendering it more rapid, Werder had, on the evening of the 9th, sent two squadrons along the roads he intended following, with instructions to see that they remained unobstructed on the next day.

Staff-officers had, on the morning of the 10th, been dispatched to all the difficult passages, and the points where the roads narrowed, to direct the various forces to take up the trot and double-time here.

The troops received orders to march: the infantry by sections, the cavalry by 6's, and the wagons by 2's.

A special detachment, placed under command of Colonel Willisen, and having a strength of 2 battalions, 13 squadrons, and 2 batteries, was formed, and stationed at

Lure, with instructions to keep touch with the enemy and cover the flank.

Lastly, at the time of the departure of the forces, which was effected in the best of order, the 4th Reserve Division took post at Athesans, about 4⅓ miles from Aillevans, to protect the movement.

Simultaneously, the Combined Brigade and the Baden Brigade were dispatched upon Béverne, and toward the road from Lure to Ronchamp.

Thanks to these dispositions, the troops were able to take their mid-day meal undisturbed, make a march of about 12 miles, and reach their assigned cantonments unmolested.

The 4th Reserve Division, having to move off in turn, placed two rear-guards 3 kilometres behind Athesans, at Leval and La Vergenne.

Nothing arose to interrupt this march, and on the following day, the 11th, the XIV. German Corps established itself upon positions which had been previously lined with a formidable artillery by the commander of the Belfort siege corps.

This operation shows us that nearly the same principles apply to both voluntary and forced retreats;

That in presence of a largely outnumbering adversary, the rear-guards, should be strongly constituted, and prepared to make a prolonged resistance;

That, finally, the positions which an army seeks to occupy in such cases, should be thoroughly organized before the arrival of the enemy.

§ 2.—CHANZY'S RETREAT IN 1870.

The war of 1870–71 offers us various examples of compulsory retreats. One of the most remarkable, one of those which have excited the most attention, and which merit the deepest study, was that executed by

General Chanzy in December 1870, first from Loigny to the Loire, then to the Loir, and finally to the Sarthe.

I.—Retreat of the 16th and 17th Corps upon the Josnes-Beaugency Position.

After the combats of Patay and Boulay, on December 4, 1870, which were sequels to the battle of Loigny (December 2) and the actions at Artenay and Chevilly, the 16th and 17th Corps, commanded by General Chanzy, found themselves cut off from the rest of the army, which, under orders of General d'Aurelle, had fallen back upon Orleans, and thence toward Bourges in two different directions, the 18th and 20th Corps *viâ* Gien, and the 15th by Salbris.

The 16th and 17th Corps had, about noon of the 4th, during the struggle against the forces of Frederick Charles, received instructions to retreat upon Orleans.

"It was no longer possible to effect this movement.

"The only thing that could be done was to get the convoys and artillery *matériel* out of the way as rapidly as possible on the road to Beaugency, and endeavor with the 1st Division of the 16th Corps and whatever portion of the 17th could be assembled, to attack the enemy upon his left." *

The result of these dispositions was a first retreat of these two corps upon Huisseau, by way of the forest of Montpipeau. The 1st Division of the 16th Corps covered the movement.

The night of the 4th was passed in vain attempts to renew communication with General d'Aurelle. At daybreak, persuaded that all efforts to this end were futile, General Chanzy decided to withdraw to the line Josnes-Beaugency.

His order for the retreat prescribed the following measures (*See Plate XXV.*):—

* Chanzy, *Second Army of the Loire.*

"From intelligence received to-night, it appears advisable to abandon the march upon Orleans and retire upon the positions Beaugency, Josnes, and Lorges, supporting the right wing on the Loire and the left on the forest of Marchenoir, the issues of which are occupied by the troops of the 21st Corps.

"This movement in retreat must be made slowly, so as to permit the convoys to precede the army by a distance of at least three leagues in the directions which the divisions are to follow. The cavalry, connecting with the 1st Division of the 16th corps, will retire *viâ* Coulmiers, Villorceau, Champdry, Bizy, and Villermain, upon Poisly.

"The 1st Division of the 16th Corps, by Grand-Lus, Baccon, and Montigny, upon Lorges.

"The Flanders Division will pursue the same course, awaiting before quitting Baccon until the Jauréguiberry Division has replaced it there.

"Both the other Divisions of the 17th Corps will direct themselves from Huisseau upon the chateau of La Touane, Les Châtres, Cravant, and Ourcelle.

"The 2d and 3d Divisions of the 16th Corps, after having permitted the convoys, parks, and the reserves coming from Saint-Ay to defile, will begin the retreat upon Beaugency.

"The divisions will all march in line of battalion columns, at deploying distance, with their artillery in the intervals, and covered, at least a kilometre in rear, by a strong line of skirmishers, who will resist the attempts of the adversary as long as possible.

"It is of the greatest importance that each division regulate its movements by those of the others, so as to insure reciprocal support, and it is equally essential that strict order be preserved in the battalions.

"To-morrow evening, the 16th and 17th Corps will be established upon the following position, faced toward

the enemy: from Poisly through Lorges, Ourcelle, and Villorceau, to Beaugency.

"The headquarters will be at Josnes.

"Each division should hold its convoys and reserves at least 2½ miles in rear.

"The movement will be commenced at 8 A. M., by the divisions which are at Huisseau, upon which the other divisions will regulate their march.

"The general commanding the 16th and 17th Corps will march from Huisseau upon Touane, Baccon, Cravant, and Josnes.

"Each division commander will send him hourly intelligence of everything that takes place, and during the evening will dispatch to him at Josnes, orderlies capable of indicating the location of each of the headquarters.

"Upon arriving at the assigned positions, the division generals will seek the most favorable sites for their batteries, and will construct epaulements and shelter-trenches. As the enemy is to be stopped on this line, the troops should not go beyond it in their retreat.

"Each division general will make such dispositions that food and forage may be issued immediately upon going into bivouac, care being taken to insure the continuance of the supply up to and including the 7th inst. The infantry and artillery ammunition will be replenished."

General Chanzy was forced to limit his rearward march to the Josnes-Beaugency position, because "to continue the retreat in the condition in which his young troops found themselves at the time, in point of *morale*, as a consequence of the lack of success to which they had been obliged to submit since Loigny, would be to expose them to a complete scattering, which might mean the loss of the greater portion of the army."

Moreover, his movement protected the valley of the

Loire and covered Tours, then the seat of the Government of National Defense.

This operation was effected without impediment, the enemy not having pursued.

On the evening of January 5, Chanzy's forces were in position to the east and north of Josnes, from Beaugency to Poisly, the line running through Lorges, Ourcelle, and Villorceau, and thence to the Loire; but the Barry and Maurandy Divisions (2nd and 3rd of the 16th Corps), more severely tried and more demoralized than the others, pushed on as far as Blois and Mer to refit and reorganize.

In this position the right was covered by a column brought forward from Tours to Beaugency by General Camô, and the left by the 21st Corps, which, under the orders of General Jaurès, occupied the forest of Marchenoir.

Comments upon this Retreat.—The direction of this retreat has been described as excentric. It was, however, logical and regular. For, once cut off from the rest of the army, the two corps confided to General Chanzy had no other natural line of retreat than that of Beaugency, a point at which they could resume communication with the commander-in-chief by the bridge over the Loire. Moreover, by taking this direction they covered Tours, from which place supplies and reinforcements were at the time drawn.

The idea of making as short a retreat as possible, with a view to avoiding disorder and a scattering of forces, was conformable to principles. Lastly, the project of appuying upon a defensive position while reforming his troops, was equally so. Besides, the situation did not admit of any other solution, and the plan resolved on appeared to have the advantage of imposing upon the enemy—a conjecture justified, indeed, by circumstances.

The tactical measures decided upon for the march are worthy of notice.

The movement was to be executed by divisions, each in line of battalion columns at deploying distance, with the artillery in the intervals, and a chain of skirmishers a kilometre in rear.

This, a formation preparatory to the combat, maintained a remnant of cohesion among the already shaken troops.

Moreover, the ground lent itself to this disposition during the period the retreat was to continue. Without this, it is not doubtful that the proper plan here would have been to employ the regular formation in column, with a brigade per corps as rear-guard, each brigade having at disposal at least two or three batteries and a regiment or a brigade of cavalry, for reconnoitring duty.

II.—Retreat to the Loir.

On December 5, 1870, M. Gambetta, Minister of the Interior and of War, decided upon converting the army hitherto operating under General d'Aurelle, into two separate armies. One of these, denominated the 1st Army of the Loire, and commaded by Bourbaki, was composed of 3 corps, the 15th, 18th, and 20th; the other, the 2d Army of the Loire, under orders of Chanzy, was formed of—

The 16th Corps (Jauréguiberry),

The 17th Corps (De Colomb, temporarily Guépratte),

The 21st Corps (Jaurès).

The first two corps each contained 3 divisions (varying from 12 to 13 battalions, with 3 batteries), a division of cavalry, and an artillery reserve consisting of from 8 to 11 batteries.

The 21st Corps was made up of 4 divisions of infantry (each with 2 or 3 batteries), a division of cavalry, and a

reserve forming a special body. These troops were commanded almost exclusively by naval officers.

This army had scarcely two days in which to recuperate. Commencing with the 7th, it became engaged in a series of combats against the detachment under the Grand Duke of Mecklenburg, reinforced by the X. Prussian Corps, which was moved to the right bank. Meanwhile the army of Frederick Charles, in position at Orleans, pushed reconnaissances to the south and east.

These combats were kept up until December 10. After four days of conflict, the strength of our forces was so seriously impaired that they were unable to longer continue in action.

M. Gambetta arrived at Josnes on December 9, and announced that the movement directed against Tours by the Germans along the left bank of the Loire, and the proximity of their heads of column, had decided the Government to retire to Bordeaux.

On account of the condition of Chanzy's troops, he authorized a falling back to the Loir.

This must be called then a forced retreat. But in order to deceive his adversaries and add to the security of his own operations, Chanzy still held his positions on the 10th, and made an offensive thrust to the front against Origny (a village which the Germans had taken the day before), recapturing the place.

On the same day, information was received to the effect that the enemy, after seizing the chateau of Chambord, had moved upon Blois, where the Maurandy and Barry Divisions had taken post. The lack of cohesion in these units and the progress of the Germans, compromised the 2d Army's line of retreat upon Tours and threatened its rear.

Chanzy then decided to commence his retrograde march toward the Loir and Vendôme on the 11th.

This delicate operation called for precaution. It was

essential, in the first place, to ask in what localities the adversary had an interest in anticipating us. Held off in front, he might seek to forestall the army upon the Loir by moving to the north of the forest of Marchenoir, or might force a passage of the Loire at Blois and threaten its right flank.

To prepare for these contingencies, the general-in-chief directed a brigade, with a section of artillery, upon the crossing-points of the Loir in front of the forest of Marchenoir, from Fréteval to Saint-Hilaire. It was to defend these points, and observe the roads in the direction of Châteaudun by which hostile parties coming from Chartres might be able to disturb the army.

All disposable *francs-tireurs* were dispatched to the north of the same forest, with orders to occupy the villages lying upon the borders, and to evacuate them only by degrees, or according as the army passed.

Finally, Blois was to be defended to the last extremity. General Chanzy, in this view, sent General Barry the following instructions:—

General Chanzy to General Barry and the Prefect of Blois.

"JOSNES, DECEMBER 10, 1870.

"It is of the greatest importance that the enemy, who is on the left bank, should be restrained from crossing the Loire. According to information this day received from Tavers and Mer, he has as yet made no attempt to establish a ponton bridge.

"Have the river from Mer to Blois held under sharp watch, and keep me accurately informed. It is necessary that at Blois all attempts to effect a passage be resisted to the utmost. There was too much haste shown in the blowing up of the Blois bridge, since the enemy

was not in sight. Greater coolness should be exercised in dealing with the one at Chaumont, which must not be destroyed until it is found to be clearly impossible to prevent access of the adversary.

Signed: "CHANZY."

General Chanzy to General Barry at Blois.

"JOSNES, December 10, 1870.

"You are to defend Blois to the last extremity. Hurry forward ammunition from Tours if your supply is insufficient. Organize all the forces at your disposal, and utilize the defensive works prepared in view of an attack upon Blois. Call in the Desmaisons Brigade, which belongs to your division. We have held the enemy in check for three days, in actions lasting from morning till night, and you will be in no danger of having to cope with a force of any size; considering the troops at your disposal, you will certainly be able to prevent a hostile crossing of the river in your front; you should still have artillery remaining: make disposition of it and report to me.

Signed: "CHANZY."

In a third dispatch, dated the 11th, the general-in-chief indicated to General Barry, in the following terms, the direction in which the latter was to retreat:—

"Hold Ménars as long as possible; do not evacuate Blois except as a last resort, and to-morrow night if you are constrained to do so.

"Retire upon Amboise, picking up successively the troops in the valley in rear of you; and from Amboise direct yourself upon Saint-Calais *viâ* Château-Renault and Montoire . . . . Get under way to-night for Vendôme all the *matériel* now at Blois. It is advisable that this removal be made as rapidly as practicable. Your

mission is of the greatest importance. Act then for the best, retiring as slowly as possible, and preventing, so far as you are able, the passage to the right bank, of the hostile force now on the other side of the river."

On the morning of the 10th, the gravity of the situation decided General Chanzy to dispatch to his corps commanders orders for the retreat.

Wishing to veil the movement, he prescribed that at daybreak the usual combat positions be occupied, the customary reconnaissances undertaken, and all preparations made for attack.

If the enemy did not stir, the operation was to commence at 10 o'clock.

The general direction was:—

Fréteval for the 21st Corps;

Oucques for the 17th Corps;

Selommes and Vendôme for the 16th Corps.

Each corps was to push out its convoys in advance during the night.

The march was to be executed *en échelons*, slowly in case the enemy attacked, at a rapid pace if there was absolute certainty of escaping such thrusts, but only under these circumstances.

The various corps had their routes marked out, and to those of the wings was made over the part of reconnoitring toward the enemy with their cavalry.

Lastly, the right corps (Jauréguiberry) was to maintain the communications with Blois, and screen the retreat toward the south.

The movement was then to be effected under cover of the forest of Marchenoir (the *débouchés* of which we held), and by a rearward change of direction, pivoting on the left wing.

The region to be traversed was open, offering no good defensive positions; consequently this march across the Beauce plains, under the eyes of the enemy,

presented the greatest dangers. It was necessary to provide against them. To this end General Chanzy urgently requested General Bourbaki, then at Bourges, to attempt a diversion upon Blois or Vierzon; and to Gambetta he several times insisted upon the importance of this measure.

On the 11th the retreat commenced. But the dispositions adopted in the morning, led the X. Prussian Corps to infer that we were preparing to take the offensive, and it was not until towards noon that the advanced troops of the hostile left wing were certified of our departure, These then moved out after us. A brief, unimportant cannonading ensued in the direction of Josnes. The adversary, however, made no serious effort to pursue.

The objective points indicated by General Chanzy were therefore reached without hindrance.

On the evening of the 11th, the 16th Corps was at Seris; the 17th, at Concriers; the 21st, between Lorges and Concriers.

The latter corps, forming the pivot, had scarcely changed position.

On the 12th, our forces, likewise without difficulty, reached:—

The 16th Corps, Pontijoux; the 17th, Villeneuve-Frouville; the 21st, Viévy-le-Rayé.

They were then in the upper part of the Cisse valley, upon ground which was only slightly undulating, but which nevertheless was susceptible of a good defense.

The attitude assumed by our troops on account of their march dispositions and the directions of the general-in-chief, led the Germans to believe that we were prepared to resolutely repulse any attempt at attack. Hence the feebleness of the pursuit.

The German official account says, indeed:—

"From reports received at headquarters, and other

indications, Prince Frederick Charles became convinced in the forenoon that the enemy had abandoned all ideas of further offensive efforts, but would defend the occupied positions with all his available forces. The Prince therefore resolved to bring up the III. Corps into the foremost fighting line during the next two days (12th and 13th)," etc.

While aware of the caution of his adversary, Chanzy was yet much concerned with reference to Blois, and the greater or less security of his right wing and rear that would result from the retention or abandonment of this place.

In consequence, at 4:30 P. M. of the 12th, he sent the following telegram to General Barry:—

"HALF-PAST FOUR.

"I am without news from you since yesterday evening. Make known to me at once by a telegram to Vendôme, which will be dispatched to me thence by a horseman, whatever information you have concerning the enemy upon both banks of the Loire; your position, just how long you believe you will be able to hold it; and your dispositions in case of retreat. To-morrow, during the day, the army will be drawn up in front of Vendôme, and on the other side of the Loir from that place to Fréteval. I remind you that you are to fall back upon me when you leave Blois, together with the Maurandy troops, by the roads that shall seem to you the surest. The longer you hold out at Blois, the better will you assure the difficult movement which we are now executing. Give me news of Maurandy and the forces under you."

The general-in-chief then issued orders for the march of the next day, and the occupation of the position at Vendôme.

The 16th Corps (Jauréguiberry), intrusted with the

defense of the left bank, was to take post to the south of the city, abreast of Ste.-Anne, supporting its left upon La Houzée ravine, and defending the roads in the directions of Blois and Château-Renault.

The 21st was to march upon Fréteval, cross the river, and defend the right bank from Mont-Henri to St.-Hilaire, while pushing a detachment upon Cloyes.

All the convoys were sent on ahead upon the right bank. The force of engineers was dispatched to Vendôme, to prepare the defensive works upon the selected positions.

"The march to-morrow," said the general order, "will be commenced at 6:30 by the cavalry of the 16th Corps, and at 7 by the troops under command of the Admiral (Jauréguiberry). The 17th Corps will not start until 8 o'clock. The 21st will execute its march in such a way as to make it harmonize with the movements of the detachments on the other side of the forest.

"The divisions which are to cross the Loir will do so only after all the wagons following the same route are upon the right bank.

"After having installed his troops, each corps commander will reconnoitre the defensive positions to be occupied, and the sites for the batteries.

"Épaulements will at once be thrown up.

"Protection of the bridges should be everywhere assured."

Notwithstanding these remarkable dispositions, disorder began to find its way into the ranks of these young troops that had already done much, but whose spirits in the end gave way under excessive fatigue, privations, extremely severe weather, the continual efforts put forth, and the incessant dangers encountered.

The general-in-chief felt obliged to take notice of this growing evil, in an order of the day issued on the 12th, and to renew his injunctions to stamp it out with the utmost rigor.

While the army was thus preparing to gain Vendôme and the line of the Loir, the sinister intelligence reached headquarters, toward midnight, that Blois had been evacuated.

General Barry had resolved upon this measure as a consequence of the facts that since the 11th he had been confronted by numerous German parties which his troops had been unable to make head against, and that Mer had just fallen into the power of the adversary. The hostile occupation of this point rendered the position of the French general critical, and threatened his line of retreat. Moreover, the left bank of the Loire was in the hands of the enemy as far as Candé, almost midway to Amboise. There were hence no longer means of retiring upon this city. Therefore, after holding a council of war on the night of the 11th, General Barry had evacuated Blois on the afternoon of the 12th, and retired upon St.-Amand.

This event compromised the security of the Army of the Loire. If the enemy, after having possessed himself of Blois, had marched upon Vendôme, the right wing could have been attacked on the morning of the following day, before the various bodies had had time to rest and get their ranks in readiness.

In reality, here is what was taking place in the valley of the Loire.

So long as General Barry held on to Blois, the Prussians remained in doubt as to the direction taken by our principal forces.

After our departure from Josnes, the X. Corps had indeed advanced upon our traces, but cautiously, occupying Suèvres, Mer, and Villexanton, as it went.

The IX. Corps continued to observe Blois, waiting until the situation cleared, especially on the side of Tours and Bourges, always supposed to constitute the centers of assembly of our levies.

It was not until the 13th of December, after becoming convinced of our withdrawal from Blois, that the enemy became aware of the general movement of our masses in the direction of Vendôme.

So far as General Barry was concerned, he seemed to have held out, as ordered, until the last moment, threatened as he was by a hostile army corps, and already outflanked, on the 12th, to the north and south, by forces at Mer and Candé.

Happily, on the evening of the 13th, the 2d Army was in position behind the Loir. In its last march it had had but one engagement, that at Oucques, which was without importance.

Comments upon the Retreat to the Loir.—This movement was made by troops that had almost lost cohesion. The *débris* come across by the Germans upon the roads, the abandoned wounded found in the villages, the stragglers who allowed themselves to be captured, the disorder pointed out by General Chanzy, all showed that disorganization had taken root in our improvised regiments.

These facts set in peculiar relief the military qualities of the general-in-chief, who, with spirits undashed, preserved his coolness, his energy, his stubbornness, took all measures required by the occasion, remained inaccessible to discouragement, continued to struggle against the invasion, set a good example to all, and maintained a bearing before his adversaries which deceived them as to the real situation of affairs.

The tactical dispositions adopted at the beginning of the operation have already been indicated. It will then be sufficient to recapitulate them.

Those made upon the Loir before the execution of the march, were for the purpose of preventing the Prussians from forestalling the army upon its line of retreat.

The occupation of the villages to the north of the forest of Marchenoir permitted the use of this feature of the *terrain* to mask our movements.

Again, the maintenance of an imposing force at Blois, by assuring the army's rear, had produced an advantageous result. It had prolonged the uncertainty of the Germans respecting the direction of our retreat.

Coming to the execution, we remark the holding of the combat positions beyond the front during the forenoon of the 11th, which had been the means of concealing the retreat from the enemy until mid-day; then the echelon disposition for the march, which is the attitude of an army in good order and resolved to fight. All symptoms of weakness were thus at first disguised.

The method employed by the general-in-chief to shroud from the enemy the true line of retreat of the Barry and Maurandy Divisions, is also to be noted. He prescribed a retirement toward Amboise, at the outset, in order to put the adversary upon a false scent, and lead him in a divergent direction, while these bodies, turning aside by the first road, were to move upon Château-Renault.

Lastly, the idea of a diversion made from Bourges toward Blois or Orleans, was inspired by an exact conception of the strategic situation. It was a combination which caused the Germans a certain degree of embarrassment, and placed them between two superior masses, one of which, that to the west, was likely to seriously threaten their communications, should a reverse overtake them.

We shall see, further on, the results of this operation.

In concluding the consideration of this retreat, there are several defects to be noted in connection with the measures of execution.

At the time when the right of the 2d Army relinquished Mer, it would have been advisable to replace it

by a detachment drawn from the divisions cantoned at Blois. If this detachment had been made up of troops of all arms, it would have been able to observe the enemy upon both banks of the Loire sufficiently long to give the principal body time to withdraw, and could then have made its own escape by the right bank upon Blois.

It would thus have fulfilled the part of an observation force upon the enemy's flank, and protracted the occupation of an important point of passage. It would, moreover, have advised the force at Blois of the progress of the Prussians from this side, which would perhaps have permitted the evacuation of this city some hours later.

These two posts, the troops in which really played the part of rear-guards, should have been held, not by the most severely shaken regiments of the army, but by the most experienced, and those that at the time had the steadiest bearing.

Again, when the abandonment of Blois was decided on, General Barry should, perhaps, according to recognized principles in the case, have feigned an offensive movement. But was he able to do so? It is at least doubtful.

III.—Retreat to the Sarthe.

The Position at Vendôme.—The position taken up by the 2nd Army of the Loire around Vendôme, "was to permit it to arrest its rearward march, give repose to the troops, re-form its various bodies, whose tactical bonds had been deranged by recent combats, and renew supplies of all kinds."

However, if Vendôme was a strategic point, it presented "as a position to be defended by an army coming from Blois, great difficulties and serious inconveniences.

"Indeed, the city, lying almost entirely on the left bank of the Loir, is dominated by escarpments hard by. These are reached by a winding road in the Temple suburb. One debouches thus upon a plateau traversed by the roads from Château-Renault and Blois, which here unite."

The position at Vendôme, in order to be well defended, required, according to the admission of General Chanzy himself, a great spreading of forces. This would render "retreat difficult, if such a measure became necessary, the troops engaged upon the left bank being obliged to fall back by the ramps leading into the city, the bridges over the two arms of the river, and the narrow and tortuous streets coming out there."*

Our soldiers, moreover, had only the 13th and 14th of December in which to recruit their impaired vigor. Prince Frederick Charles was bent on dislodging us from our positions; and after occupying the forenoon of the 14th in assembling the heads of column of his various bodies, gave orders for an attack on the 15th.

The battle was fought upon the left bank, where our forces had deployed. Our right and left resisted with advantage. Upon both wings, consequently, the Prussian thrusts failed. But in the centre, toward Bel-Essort, our young troops gave ground after a combat of some duration.

Impressed, nevertheless, by this resistance, the leaders of the hostile army decided to bring up the fractions of the III. and X. corps which had been left in rear, and prepare thus for a general action on the 17th. In consequence, the 16th was spent by the Germans in effecting a concentration. Unfortunately, on our side it was no longer possible to expose our troops to fresh combats. Despite his desire to continue the struggle,

* Chanzy, *Second Army of the Loire.*

Chanzy was constrained to renounce the idea. The reports of his generals left him no alternative.

On the evening of the 15th, he gave directions for the evacuation of the positions on the next day and the withdrawal of the corps toward Le Mans, in order to take up a new defensive line behind the Sarthe.

According to his instructions, the 16th corps was to gain Troo, upon the Loir, and Montoire; the 17th, St.-Calais; the 21st, Vibraye.

The ground to be occupied on the 16th extended from Montoire to Montdoubleau, giving a front therefore of 18½ miles. This was a wide expansion for troops that more than ever had need of feeling the touch of elbow.

The design of the commander-in-chief was to reach the other side of the Braye on the 17th, while pushing his left as far as La Ferté-Bernard, to enable him to become master of the valley of the Huisne as soon as possible.

The movement was to be commenced during the night, by the sending off of the convoys; all the bridges were to be destroyed and all the fords rendered impassable on the front of the 17th and 21st corps.

The reserve batteries, posted on the right bank, had orders to concur with the 16th Corps in checking the pursuit of the Germans.

Before commencing the retreat, the corps were to take up combat positions, with a view to deceiving the enemy.

Lastly, the 16th Corps was instructed to burn the Vendôme bridges upon retiring.

On the 16th the retreat commenced in good order upon the right and in the centre. But, toward 10 o'clock, the troops reached an uneven district, where the march was restricted to the roads.

This circumstance necessitated a stretching out of the columns.

In some instances, bodies seeking convenient passages strayed from the prescribed course, and several were so culpable as to move directly upon Le Mans without any concern about the main body of the army, which they preceded by at least a two days' march. *

Disorders arose; soldiers left the ranks and scattered, seeking at the top of their speed to reach Le Mans, which was looked upon as a place of refuge. It was impossible to stop these fugitives, and soon the city was choked up by a multitude of disbanded men, who had lost spirit and cut loose from the restraints of discipline, and who, deprived of rations, and going about begging food, presented a most shameful spectacle.

Happily there remained under arms enough stout-hearted men to conceal from the Prussians these symptoms of disorganization.

This rupturing of cohesion led to most baneful consequences. The enemy, who had passed the Loir upon a bridge which we had attempted to destroy, but which in reality was not much damaged, had been able to assail our rear-guards, and capture a battery, a mitrailleuse, and 64 wagons.

The order for the retreat was not received by the generals in the left wing until about 3 P. M. General Rousseau and the commander of the 21st Corps had entered into action with the German troops occupying Morée. It was necessary in this quarter, therefore, to keep up the fire until night, and then begin the rearward march.

Nevertheless, our masses did not fall far short of the points that had been assigned them.

On the following day, the 17th, our corps were to move:—

The 16th upon Grand-Lucé;

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* Chanzy, *Second Army of the Loire.*

The 17th upon Ardenay;

The 21st upon Breil and Thorigné.

Nothing arose to disturb this march, at least upon the army's rear. The only incident that in this sense marked the movement, was the wresting of the village of Droué by a Prussian cavalry force from the troops of General Gougeard. But this officer, whose energy had not flagged for an instant since he took the field, rallied all the men within reach, and, putting himself at their head, executed a counter-thrust, which resulted in the recapture of this post.

The retreat of our army continued thus during the 18th and 19th, without serious attempts at pursuit on the part of the Germans, but, unfortunately, amidst signs of growing disorganization.

It was time to give the troops repose. Orders were no longer rigorously executed, and instructions relative to marches and outpost duty were often neglected.

Finally, on December 19, the army established itself in position behind the Sarthe. Here it recruited its strength until January 5, when it entered upon fresh contests, which culminated on January 11 in the battle of Le Mans.

IV.—Comments.

This retreat shows us still more forcibly than the march to the Loir, that the tactical bonds in the 2d Army had loosened. The weakness of this army's organization and its condition of physical and moral exhaustion, enhance the title to credit of the chiefs who directed it and the soldiers who remained steadfast in the ranks.

The tactical prescriptions had in general been observed at the time of departure. But faulty execution in two particulars came near compromising the operations of the first day.

The insufficient destruction of one of the Vendôme bridges favored the pursuit of the Prussians. Then the tardy receipt of orders for departure, by the left wing, nearly led to the separation of the army into two groups at a time when, more than ever, it was essential to preserve unity on the march.

During the retreat, collisions occurred between the columns of the 16th and 17th Corps, because the corps and division staffs had not been able to reconnoitre the roads to be followed.

On each day, however, so far as it was practicable, the sites to be occupied were defensively organized, and the troops still under control of their leaders were well covered in rear, according to General Chanzy's recommendations, by lines of skirmishers forming a curtain, themselves protected by vedettes kept out at a considerable distance.

Still, in the grand units, the necessity of maintaining the convoys a march distant from the troops, was not yet understood at its proper value.

It is beyond question that if the army attained its object, it was especially due to the absence of serious pursuit on the part of the enemy after the 16th December.

This attitude of our adversaries requires explanation.

Movements of the German Armies.—Counting from the capture of Orleans, the movements of the II. German Army, and the detachment under the Grand Duke of Mecklenburg, may be epitomized thus:—

Up to the 13th December, the date of our withdrawal from Blois, the Germans were in a state of indecision respecting the real direction taken by our masses. The troops of Frederick Charles reconnoitred in the directions of Gien, Vierzon, and Blois, consequently toward the east and south, upon the left bank of the

Loire. These reconnaissances, of a prudent and measured character, were restricted, toward the east, to the occupation of Gien by a detachment of the three arms; toward the south, to the possession of Vierzon by a brigade of cavalry.

Upon the right bank, to the north of the forest of Marchenoir and in the valley of the Loire, similar reconnaissances were made by the Grand Duke's force. Lastly, offensive combats of a more or less vigorous character were delivered, principally upon the front of the 16th and 17th Corps, by the X. Prussian Corps.

With reference to the circumspection shown by the troops of the Grand Duke in their various operations, it arose, as we have seen, from the bearing of General Chanzy's corps, which was energetic, often offensive, bespeaking constant readiness to engage.

After our evacuation of Blois, the pursuit by the Germans, while being somewhat more robust, yet lacked that ardor displayed by them in the early part of the war. The character of their attack upon Vendôme makes this apparent.

As a result of these repeated efforts, Prince Frederick Charles was led to take measures, on the 16th, for the concentration of the various bodies under his command, in order to crush out Chanzy's resistance.

While this concentration was under way, the announcement was made of our retreat to the Sarthe. This intelligence, instead of accelerating the pursuit, had just the opposite effect.

Prince Frederick Charles quitted the Loir, and repaired to Orleans, making over the duty of following the enemy to the Grand Duke, to whom he to this end assigned the X. Corps and a division of cavalry. At the same time, he instructed the IX. Corps to return to Orleans by forced marches.

The Grand Duke's detachment now ceased to operate

under the orders of Prince Frederick Charles, its control reverting to the general headquarters at Versailles.

What had occurred to suddenly modify the situation, and necessitate the recall of the chief of the II. Prussian Army to Orleans and the separation into two parts of a force which undivided seemed scarcely sufficient to conclusively beat Chanzy's army?

The ardor of the German leaders had, for some time, been cooled by a variety of circumstances.

This is shown, in the first place, by a dispatch from General Von Moltke, dated December 12, which, it appears, prescribed to the armies covering the siege of the capital to confine their efforts to a determinate zone around the circle of investment.

Orleans was designated as the centre of observation of the II. German Army, with Tours, Bourges, and Nevers as the extreme points to which movements would be made.

Chartres was likewise to become the headquarters of the Grand Duke, whose surveillance rôle was to be exercised particularly toward the west.

Moreover, the attention of Prince Frederick Charles was attracted to our assembly of forces at Bourges. The solicitude which he persisted in harboring with reference to affairs in this quarter, had for some time been his principal objection to the Grand Duke's design of marching westward. The dispatch from Von Moltke served but to confirm his apprehensions. These views on his part, joined to the attitude shown by Chanzy's troops, had abated the vigor of the pursuit. It was brought to an end by the receipt of unexpected and rather serious intelligence at the German general headquarters on the afternoon of the 15th.

General Von der Tann, left at Orleans, had reported the forced evacuation of Vierzon by the 14th Cavalry Brigade. Some hours afterwards, a fresh telegram

announced that the troops left at the approaches to Gien had been attacked, on the 15th, by superior forces coming from Briare, and compelled to abandon the place.

"From all appearances," says the German official account, "the masses collected in the vicinity of Bourges under General Bourbaki, had made preparations to advance upon Montargis and Fontainebleau. Now in such an event, the commander-in-chief could at first have opposed him with only the part of the I. Bavarian Corps already at Orleans."

This news, added to the information received of our retreat to the Sarthe, had decided Prince Frederick Charles to return precipitately to Orleans.

In reality, what was taking place during this time to the south and east of the Loire? A single event, without apparent significance, but which none the less, from a tactical standpoint, was of real importance, and which led to advantageous results.

General Bourbaki, yielding to the request of his colleague, and to the solicitations of Gambetta, had directed a column upon Vierzon and another upon Gien, despite the disorganized condition of his troops. The Germans, very weak at these points, and deeming the movement a resumption of the offensive on our part, had fallen back. Our troops of the 1st Army did not go farther. But this limited effort was sufficient to exercise a most favorable influence upon our operations in the West.

This was very frankly acknowledged in the following terms by Major Von der Goltz, then a captain on the staff of Prince Frederick Charles:—

"Had Orleans fallen into the power of Bourbaki, the II. Army would have been obliged to return by forced marches, with the 2d Army of the Loire in its traces. Had Chanzy gone back thus and reoccupied Beaugency,

would not this have been regarded as a victory for him, and would not this apparent success have aroused the nation—would it not have armed the whole of France?

"It was possible, of course, to divide the German forces, engage Chanzy with the troops of the Grand Duke, and Bourbaki with the two other corps. But this would have been to risk the fate of the campaign upon two points at once.

"Such were the reflections that agitated the general-in-chief, who was undecided what course to pursue."

While matters stood thus upon the Loire, the Grand Duke, on his part, was thinking of retiring upon Chartres.

"The Grand Duke's detachment," says the German official account, "was charged with pursuing Chanzy's retreating forces beyond the Loir."*

But when his command was left to its own resources, the German general realized "that to carry out this design, extended marches would be necessary, and that his troops were much in need of rest." In consequence, "he decided to remain for a few days in the positions then occupied upon the Loir, before commencing his march to Chartres."†

In reality, the Germans renounced the pursuit on account of the exhaustion of their troops; and in order to disguise this situation of affairs, the 5th Cavalry Division (Von Rheinbaben), then at Chartres, was instructed to gain touch of our forces and harass them during their march upon Le Mans. These were the troops that assailed one of our outposts at Droué, and that, meeting with a repulse, afterwards contented themselves with observing us at a distance.

Our enemies have not avowed the critical situation in

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* *Franco-German War*, 15th Section, p. 664.

† *Idem*, * *idem*, p. 665.

which they were placed by the patriotic efforts of the Government of National Defense, the activity of General Chanzy, and the resistance of our young troops. The admission may, however, be found in the history of this campaign by Major Von der Goltz, in the following terms:—

"In the second part of the war, the aspect of the struggle changed: the contest was now waged by the people, and if it did not altogether endanger the safety of our troops, it at least rendered reconnoitring and outpost service much more arduous. In the first period of the war, the cavalry was launched forth ahead of the columns, and the latter upon arriving at their places of bivouac, felt secure under its protection, without making too heavy requisitions upon their troops for outpost duty. All this was now, indeed, changed. Before the army's front, every farm-house, every thicket flashed forth its shots, which led our cavalry patrols into constant and bootless pursuits.

"The duty of assuring the army's safety became difficult, required numerous forces, and even then the peril was not always warded off. The German armies upon the Loire were forced to double, sometimes to treble, their outposts, and to occupy a greater stretch of country than their effectives warranted. The service of the communications and that connected with relays, increased in the same proportion. Combats thus became less energetic, were conducted with less spirit, and, which is characteristic, long range musketry and artillery fire grew in importance. * * * * Of corps and battalions there remained but the title, the strength and value had vanished. A corps now was scarcely as strong in infantry as a division at the beginning of the war, and the best elements had disappeared through the bullets of the enemy and the fatigues undergone. The baggage convoys swelled in dimensions, and weighed

heavily upon the march of the army, whose columns were now constrained to advance slowly, not being able from morning till night to cover more than two or three [German] miles. Some divisions, the 22nd among others, were cut down in infantry to the size of brigades; the entire I. Bavarian Corps had now only about this effective.

"As to the corps of officers, there was no longer much accord between their regular military positions and the duties upon which they were engaged. In fine, many officers of the reserve commanded active forces, and numerous depot troops were in the ranks. Up to December 11, the German soldiers had made their way over ice-covered courses at the price of a thousand hardships; since that time, through wet and rain. The roads were broken up; where the batteries had to pass, it was necessary to make beds of branches or suffer the wheels of the gun-carriages to sink in to the naves. In many battalions the men were barefooted; others had wooden shoes or linen leggings. In the Grand Duke's army there were companies in which forty men or more were quite without shoes. Lastly, it had not been possible to entirely replenish the ammunition: there was enough still for a few combats, but not sufficient to permit the carrying forward of a series of operations."

Such was the situation of our adversaries.

Such also were the principal incidents of the retreat of General Chanzy. It must be regarded as one of the most remarkable operations of the war of 1870–71. It leaves, upon the whole, a favorable impression, and bids us trust in the future, in the day when new efforts are to be made, no longer with improvised troops, but with disciplined contingents, inflamed with sentiments of military honor and patriotism.

SEVENTH CHAPTER.

CONCLUSION.

The preceding studies in military history do not aim simply at setting forth the principles of strategy and grand tactics governing to-day in the conduct of armies.

They have a higher and more patriotic aspect. They show us the chief causes of our defeats and of the successes of our adversaries.

But they inform us also that in 1870 there were many military occurrences to which we may justly refer with pride. Upon analyzing them, upon examining them in their true light, it is not difficult to see that, suffering under the lash of misfortune, we have failed to judge events according to their merits. Weighed down by calamity, and obedient to the instinctive impressionability peculiar to our race, we have thought only of sitting in judgment upon our deficiencies, and have left our adversaries a clear field in which to relate the history of their campaigns and recount their exploits.

Our army delivered unequal combats and sustained actions which, in other times, despite the final repulses, would have been denominated heroic. We have disdained them, refusing even to cull the honor justly due our soldiers.

Battles were gained which required nothing to impress upon them the seal of success save the occupation of the ground abandoned by the enemy, or, certainly, a forward movement which he was powerless to prevent! We have permitted history to register these as defeats for us and triumphs for our foes.

Finally, we have not ceased to deplore the continuity of our reverses and the implacable malice of fate; while, in reality, our generous efforts upheld the honor of the flag, and testified of a nation so proud that even when stricken down it fought on with energy.

What were indeed the battles of Borny, Rezonville, Noisseville, Ladonchamp, in which nothing was lacking to crown the success of our arms but a directing mind untrammeled by personal considerations? And, later, were not the combats of Valière, La Renardière, Coulmiers, Villepion, Pont-Noyelles, Villersexel, and Chenebier, successes?—to speak only of those actions we have described. What differences in the estimate of events when history is studied in the light of authentic documents! What consolation for our soldier hearts, and what hope of conquering in our turn should another war come upon us!

Again, the Prussians owed their victories, we see, less to the genius of their leaders than to a sound application of the rules of the military art. Their logic in this respect, and likewise their practical good sense and their persistency, appear at every step in their operations, and command admiration; but their designs and achievements fall far short of the grand combinations and inspirations of Napoleon I.

In considering Prussia's military system, we are confronted by a remarkably equipped machine, all of whose wheel-work, perfectly arranged, operates with constant regularity and without effort. The engineers who direct it, full of ardor and resolution, after having well studied the uses of their instruments, get from them, without difficulty, their maximum yield.

If, in general, we seek for the means employed by our adversaries to arrive at success, we find:—

1st. An organization which gave them the greatest possible number of armed men in the aggregate, and of thoroughly trained first-line soldiers.

2d. A simple and rapid mobilization.

3d. Advantageous bases of concentration.

4th. Marches which assured the concentration of their masses on the day of combat.

5th. The most improved means of destruction.

6th. An essentially practical method of combining the three arms.

If to these advantages we add a continual increase in the moral forces, an excessive development of individual initiative, and the murderous effects of the needle-gun in 1866 and of the artillery in 1870, we shall nearly have penetrated the secret of their triumphs.

At first sight all this appears simple, to us, especially, who are endowed with qualities of initiative and ardor, which render armies audacious and valiant.

Yet we must not make any mistake in the matter. In order to unite such elements of success, there must be alive in an army certain conditions of stability, unity of command, and encouragement for the putting forth of efforts—qualities that do not exist to the same degree in all nations, even among the most warlike.

It is not doubtful, then, that from various points of view we still have progress to make, although results of great importance have been attained during the past few years. If, on the one hand, we to-day possess means of destruction as effective as those of our neighbors, on the other, we do not perhaps utilize our strength as skillfully as circumstances demand. Among the improvements of a nature to give marked advantages to our military situation, and palpable form to our chances of success, must be included:—

1st. A law on the subject of recruiting which will assure us more instructed first-line men and more fresh combatants.

2nd. A mobilization which will simplify the division of work and suppress all causes of disorder and delay.

3rd. An enlightened and constant preparation of *projets* of operations.

4th. As perfect and as wide-spread a knowledge as possible upon the tactical rules relating to the employment of the different arms.

5th. Habits of exercising the initiative, whereby all the depositaries of command may, without hesitation, take the measures demanded by circumstances as they arise.

One of the most effective means of reaching these results, is certainly through a logical study of the facts of war. It is in this study, indeed, that one may best find means of forming correct ideas both upon the method of making use of the ground, and the tactical formations appropriate to the various situations presented on the offensive and the defensive.

But when in France taste for work of this character takes a deeper hold and wider reach, when a thorough acquaintance with the most usual circumstances of war has been attained, supplying the place of experience and practice, it will still be imperative to foresee the events in the midst of which our officers are to exercise their faculties and apply the principles acquired.

A serious question surely, and one of difficult, if not impossible, solution. Yet for all this, it is not sufficient merely to learn to fight, it is necessary still to know where, when, and how we are to fight. Here, after meditating upon the lessons of the past, we must especially interrogate the present, must have our eyes fixed upon the military happenings beyond the Vosges, and our ears ready to catch the faintest murmur coming from this quarter. In this connection, one of the foremost military writers in Germany, Major Von der Goltz, gave us last year in his work, *The Nation in Arms*, warnings which it would be imprudent to neglect. They are as follow:—

"The Germans must expect a new war with France. This will be a race war, and one of extermination.

"The French are no doubt resolved to maintain it to the last extremity. But as they are an enriched and narrow-minded bourgeois people, ready at the first reverse to believe that all is lost, it will be easy to overcome their resistance.

"To this end, it will be useless to conquer their country. By occupying their capital and their fortified places, by taking possession of those provinces which are *not intimately connected with the State* by affinities of race, and, finally, by isolating them from the rest of the world, the object will be accomplished.

"Yet this result can be secured only on one condition: It will be necessary to employ against them all our disposable forces, and the most complete means of destruction.

"Wars, moreover, will always be inevitable. They are the lot of humanity.

"But a victorious war will ever constitute a claim to glory and nobility for the people undertaking it, the generals directing it, and the soldiers engaging in it.

"Empires have their life like human beings. Like them, they are born, attain to full growth, and die. The French are among those that are dying.

"The Germans, on the contrary, are in the period of growth. The star of the young empire has just risen above the horizon; its course is all before it. The way toward the zenith is more agreeable than that downward thence. And if ever a rising state afforded promise of a long existence, it is Germany, strong and united in the midst of the Great Powers of Europe.

"This is Germany's providential destiny, and to accomplish it, she needs to wield a trenchant sword in the heart of Europe.

"Bound up with this mission is the necessity of ac-

cepting and decisively affirming *the supremacy of the German people over all others.*

"In consequence, it is essential for her to unceasingly augment her moral and material forces.

"By pursuing this path, the German nation will be sure of bearing off the final victory."

Such is the morality of *The Nation in Arms.*

It contains the essence of the ideas and convictions which appear to form a national public opinion beyond the Vosges.

It would be a strange illusion to see here anything but a hope of exterminating our race and our country. Useless is it, moreover, to discuss this hope: it is the fruit of hereditary hatred, which the most unexpected successes, the dizziest intoxications of pride, the most dazzling triumphs, the most resplendent trophies, even revenge itself, have not been able to satisfy.

We are warned. It behooves us to deliberate upon the situation.

Now, in examining the matter calmly, two questions are presented:—

1st. *Shall we be prepared to sustain such a war?*

2nd. *Is this indeed the future that awaits us?*

Let us consider them in order.

So far as our preparations are concerned, we have for some time been able to look events in the face with confidence. We are in condition to contend with the greatest energy against hostile aggression coming from one or even from several quarters. We stand ready with agencies of destruction as murderous as those of other armies; and, again, our defensive system has been so organized as to divide the efforts of our adversaries and permit us to strike formidable blows in the most advantageous directions. Our masses are equipped, armed, trained; we are ceaselessly working to temper them for active service; and a declaration of war would

find us in a state of preparation far different from that of 1870.

But it is not sufficient to be ready, or to possess the necessary arms. We must still be assured of the means of attaining success. We must hold in our hands the factors of victory.

Every one repeats, when speaking of these contingencies: "All will depend upon the opening battle." While this is not altogether certain, it may yet be said that the first great engagement will have a considerable influence upon the events which follow. In consequence, each of the belligerents should direct all efforts and all thoughts toward a single object—the first success. Now, one is able to say in advance that victory will depend:—

1st. Upon the more or less skillful union of the combat elements.

2nd. Upon the manner of calling these into play.

This conviction once acquiesced in, what is essential to success? The Germans have resolved the question thus:—

The most skillful union of the combat elements consists in bringing a crushing numerical superiority to the initial battle-field.

The theatre of first combats will be situated upon the approaches to one of the grand channels of invasion that our defensive system has created upon the frontier, probably in the Toul-Épinal region. This established, numerical superiority in the opening contests becomes a simple question of rail outlet to this part of the frontier. Penetrated by this truth, our adversaries of 1870 have constructed in this zone as many main and branch rail-lines and military detraining stations as possible. The mass of men that they are in condition to throw into this section, can be accurately computed, hour by hour.

It behooves us to have, on the same side, as many railroads, especially double-track lines, and as many detraining stations, as they; and, like them, to establish the latter as close as practicable to the probable theatre of first engagements.

If need be, we should do better still.

The second question, putting in operation the combat elements, is of another kind. It is less material, and therefore less easily grasped.

To reach a solution, however, the Germans have employed a means that is quite simple. They have said to themselves that henceforth, with the expansion of battle-fields, the dispersion of forces, and the necessity of screening the latter from view, each commander of a tactical unit will often find himself thrown upon his own resources; that in those terrible hours when life is at stake, most of the combatants are naturally disposed to expect from a chief the decision which is to put them in movement; that the moment for action is thus often neglected; that isolated efforts are then lost, and the most skillful combinations frustrated, by errors of detail. From these considerations, they have concluded that in future it will be necessary to accord to all depositaries of command a complete initiative, even at the risk of seeing the latter, through errors of judgment, engage too far to the front. In consequence, they give all possible attention, in time of peace, to the development of this faculty.

Every act of decision, every initiative taken in the service, meets with encouragement, and it is certain that to-day, in action, a German officer would never await orders to seize a point of ground which seemed to him an advantageous position. He knows that his initiative will be approved, that it is his duty to exercise it, and he does so without hesitation.

Respecting the conduct of a modern combat, it may

be affirmed that every force, every army, which, from reasons of administration or through other causes, as a consequence of unsound traditions or habits of routine, fails to develop this faculty to the same degree, will register the chances of success against it.

In this regard, unfortunately, men are subject to so many illusions, that this progress, so simple in appearance, is extremely difficult to realize.

Let us pass to the probabilities of the future.

For some years after our disasters, the idea was abroad in Europe that we were bent upon retaliation, and that once our material forces were put in proper condition, we intended rushing into new enterprises. Powerless to prevent the circulation of mendacious reports, to refute false news, to combat malevolent estimates of our attitude, we have been obliged to let these things pass unnoticed. France has been engaged in nursing her wounds; and her army, striving to respond to the confidence reposed in it by the country, has prepared to courageously defend her honor and her independence.

Days have passed; they have glided into weeks, months, years; and our country, absorbed in repairing the losses of the past, has remained steadfastly calm, faithful in her devotion to peace, which had become for her people a need and a necessity. It is easy to see that the projects of revenge which have been ascribed to us are not expressions of the truth. It seems, however, that justice has not been done us in this regard, and the plainest results of our pacific attitude have been to lead some to say that we were forever crushed, and others, like the author of *The Nation in Arms*, to affirm that the Germans should prepare to wage a war of extermination against us.

It would be useless to endeavor to modify these views.

What concerns us especially is to know them, to be certain of the exact character of the sentiments we in-

spire, to appreciate clearly the dangers which threaten us, to render to ourselves account of the opinions and various circumstances in the midst of which our army may be called upon to act.

From these different points of view, the author of *The Nation in Arms* is far wide of the truth.

It is false, indeed, that we long for or that we have longed for war in France. What is true, is that we shall never forget the bond that unites us to our brothers in Alsace and Lorraine; that fortune is fickle, and that the most powerful empires, like individuals, have their vicissitudes; that the consciousness of great material strength has never developed moderation; finally, that conquering nations raise up the most enemies, and that a time may arrive when the latter will have the upper hand. Such an hour, perhaps, may one day sound for France.

But, in the meanwhile, she has reared up institutions which render all wars of surprise impossible, and which will permit her henceforth to engage only in a national struggle.

There is at the present time but a single species of war for which the representatives of the nation will consent to vote—a war against an unjust attack, against a groundless aggression, or in case of a causeless declaration of hostilities. On that day, the strength of the army will be increased a hundred fold; the element of moral superiority will be alive in our ranks, and our chances of success be suddenly and unexpectedly advanced.

But there are no indications of these occurrences.

The long continuance of peace has shown the nations of Europe that their apprehensions may, without danger, be shifted from our frontiers. Our colonial tendencies have succeeded in convincing the most incredulous.

Germany, on her side, has been drawn, little by little, into an economic situation which has had the effect of modifying her foreign policy. Like us, like many other states, she has felt the influence of those crises among her agricultural, manufacturing, and laboring classes, which disturb the conditions of existence in a country, and which are the consequence of industrial progress.

She has been obliged to submit to the necessity of expansion, which sooner or later seizes all compact nations and those that produce beyond the requirements of consumption.

A day came when, in order to respond to this need, she was driven to seek colonies; and now, to satisfy her desires in this direction, she is forced to involve herself with other nations than ourselves.

Such is her path to-day, her enforced path. This state of things protects us, for the time being at least, from the probabilities expressed with so strong a sense of conviction by the author of *The Nation in Arms.*

We shall be able then to continue with ardor the work of improving our military condition, of tempering ourselves for active service, of adding to our strength, in order to be in readiness for the struggle for independence, if it must one day come. And that we may be the better prepared, we should never lose sight of the fact that for some time the partition of our territory has been resolved upon. The spoils have already been distributed.

At the time of the second invasion, in 1814, the other States of Europe had only a single object in view—to vanquish us.

In the following year, it was another thing. At the Congress of Vienna, the idea of dismembering us was displayed in broad daylight. It was by the very inordinacy of certain appetites that our destruction was pre-

vented. We owed our existence to the rivalries of our enemies.

But the project of annihilating France was openly discussed, and almost adopted.

We have in a measure forgotten these things, and the brilliancy of our past glories for a long time prevented us from discerning the hatreds which inspired these combinations.

The catastrophe of 1870 itself was not sufficient to fully open our eyes.

Since that time, fortunately, the ingratitude of some and the jealousies or ill-will of others, have been exposed to the day, and must have the effect of dissipating the rest of our illusions. Henceforth, doubt will not be permissible. Here is the reality of the situation:—

If ever the war of extermination does come, and we are definitively conquered, the partition of France will be consummated as follows:—

Belgium will take in to the Somme, annexing our Departments of the North and *Pas-de-Calais*. It is already taught in her schools that the dukes of Brabant are the heirs of the ancient dukes of Burgundy, of Philip the Bold, especially, whose kingdom once extended from the Zuyder Zee to the Somme.

Switzerland will push her boundaries to the Saône; Italy to the Rhône; Spain to the Aude, the Adour, or the Garonne. Brittany, and Normandy even, will be handed back to England.

Burgundy and Champagne will be joined to Alsace-Lorraine, and the whole set apart to form the hereditary appanage of the Crown Prince of Germany, with the title of *King of Lorraine or of Burgundy.*

What is left will retain the name of France, to show the entire world that after so much greatness, so much glory, so many successes, our country remains but a memory.

May this terrible picture of the annihilation of our country remain ever present to the eyes of all those who looked upon that ill-fated year! May those who fought for her, never forget that this is not a vain word, a freak of the imagination, a lucubration without root in the reality of things! Let them guard in their hearts the ineffaceable conviction of this dismemberment and this death.

Let each soldier, each officer, in performing his service, think daily of these things! Let him say and repeat, *France is menaced*, and let him prepare himself to fight, to go forward and conquer, on the day when she is attacked!

Let him, for this supreme hour, keep alive within him the sacred fire of battle, contempt for death, devotion to the flag!

And then France shall live, again great, glorious, and respected!

END OF PART II.

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